

FOREWORD

The mission of the Federal Emergency Management Agency (FEMA) is to support our citizens and first responders to ensure that, as a nation, we work together to build, sustain and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.

In accordance with FEMA's mission, the state of Missouri and Region VII officially adopt the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri and Region VII Response Operations Plan, from this point forward referred to as the Operation Plan (OPLAN).

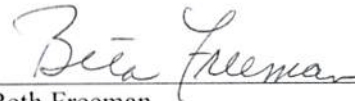
The OPLAN was prepared in accordance with the U.S. Department of Homeland Security (DHS) National Planning and Execution System through a collaborative effort from the Missouri State Emergency Management Agency (SEMA) and FEMA. DHS's Regional Planning Guide, dated March 2010, served as the planning model for plan development.

The purpose of the OPLAN is to provide a concept of operation and the assignment of roles and responsibilities to local, state, and federal agencies to meet regional planning and response needs following a M_w Scale 7.7 earthquake within the NMSZ in the State of Missouri. As a supplement to the Missouri State Emergency Operations Plan (SEOP) and FEMA's Region VII Regional All-Hazard Plan (RAHP) and Regional Interagency Operations Plans (RIOPs), the OPLAN addresses the unique operational challenges caused during such an event. The OPLAN provides detailed strategies to execute a coordinated state, federal, local, non-governmental organizations (NGOs), and private sector response during the first five days (120 hours) following the event and is a scalable resource that may be taken in whole or in part, as local governments evaluate their response needs.

The OPLAN is the result of a focused and collaborative process and we appreciate and commend the combined efforts of our emergency management whole community partners who supported the development of this plan.



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Date: January 10, 2014



Beth Freeman
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Federal Emergency Management Agency (FEMA)
Region VII
Date: January 10, 2014

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Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

New Madrid Seismic Zone Earthquake – Joint State of Missouri & Region VII Response Operations Plan

January 10, 2014 – Interim



U.S. Department of Homeland Security
Federal Emergency Management Agency, Region VII



FEMA

Missouri State Emergency
Management Agency



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Record of Change

The most current copy of this document, including any changed pages, is available through the Planning Branch, Response Division, Federal Emergency Management Agency, Region VII, 9221 Ward Parkway, Suite 300, Kansas City, MO 64114. All changes will be made in conjunction with the Missouri State Emergency Management Agency, 2302 Militia Drive, Jefferson City, Missouri 65101.

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1 Situation

The purpose of this Operations Plan (OPLAN) is to provide operational concepts unique to planning and response, as well as assign responsibilities to local, state, and federal agencies to meet the needs of local governments following a catastrophic earthquake affecting Missouri. It serves as a supplement to existing emergency operations plans and is intended to expand the earthquake response organization. As demand for limited resources will exceed surplus, the OPLAN organizes the response agencies and outlines the process to maximize resource use and request additional resources from all stakeholders. While the OPLAN addresses any earthquake affecting Missouri, the majority of statistics contained within directly relate to a Moment Magnitude (M_w) Scale 7.7 earthquake New Madrid Seismic Zone (NMSZ) scenario.

1.1 Purpose

This OPLAN provides specific and detailed strategies to execute a unified state and federal response to a M_w Scale 7.7 earthquake within the NMSZ, most likely to affect southeastern portions of Missouri including the “Bootheel.” The OPLAN is scalable to address the response to earthquakes of lesser severity or those located elsewhere along the NMSZ. The deployment of resources under this OPLAN may be undertaken in whole or in part, as individual decisions are made and risks are evaluated to meet the needs of local governments following a catastrophic event. This OPLAN focuses on approximately the first 120 hours of an earthquake response (Immediate Response, Deployment, and Employment/Sustained Response) to set favorable conditions for ongoing response and long-term recovery. Specifically, the OPLAN contains:

- Projected impacts of the earthquake
- Objectives, courses of action (COA), timeframes, and decision points
- Response capabilities
- Response actions that can or will be taken.

The NMSZ OPLAN describes the unified state, federal, local, non-governmental organizations (NGO), and private sector response to a catastrophic earthquake. As a supplement to the Missouri State Emergency Operations Plan (SEOP) and Federal Emergency Management Agency (FEMA) Region VII Regional All-Hazard Plan (RAHP), this OPLAN addresses unique operational challenges an earthquake scenario poses. The scenario for this incident was developed by The Mid America Earthquake (MAE) Center. Supplemental loss estimation data was based on FEMA’s December 2005 Hazards United States Multi-Hazards (HAZUS-MH) model HM Earthquake Event Report, Southeast Missouri. All numbers used in this OPLAN were provided by the MAE Center unless otherwise noted.

Specification of the impacted counties highlighted in this OPLAN was based on a cumulative review of direct damage and loss of functional capabilities associated with infrastructure, social impacts, and direct economic losses according to the models used to generate the NMSZ scenario. Damage, operational capabilities losses, and direct economic losses are not confined to these counties, but those losses are expected to be most severe in these areas. As a no-notice incident, this OPLAN is a flexible document that provides initial (incident to 120 hours+) organization and automatic response functions while allowing stakeholders at all levels to attain situational awareness and muster necessary resources to save and sustain lives, protect property, and promote economic and social recovery. Once an Incident Action Plan (IAP) is developed by the joint State and Federal Planning Section, portions of this OPLAN will not be used.

State and federal response actions addressed in this OPLAN are under the authority Chapter 44, Emergency Management, Revised Statutes of Missouri, and Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (Stafford Act), for either a Presidentially-declared major disaster or declaration of emergency within each agency’s authority.

1.2 Background

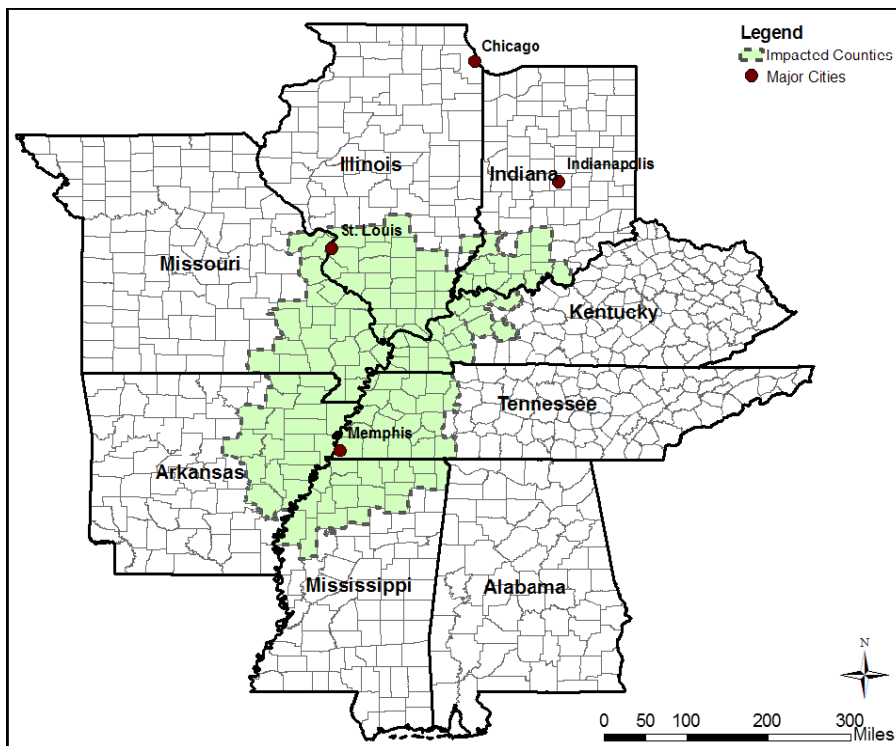
This document was prepared in accordance with the U.S. Department of Homeland Security (DHS) National Planning and Execution System through a collaborative effort by FEMA and the Missouri State Emergency Management Agency (SEMA). DHS's Regional Planning Guide, dated March 2010, served as the planning model for plan development.

This OPLAN is the result of a focused and collaborative process to use the principles of regional planning by which leaders envision a desired outcome, develop effective ways of achieving it, and communicate decisions to an organization. Federal, state, local, NGO, and private-sector entities participated in the process to clarify roles and responsibilities, and to develop an executable plan that represents the combined capabilities of these entities. The focus of the OPLAN is consistent with the principles of the National Incident Management System (NIMS) and will be implemented in accordance with the National Response Framework (NRF), Missouri SEOP, and the plans in neighboring states of Iowa, Kansas, and Nebraska. This OPLAN conveys intent, describes objectives, assigns tasks, allocates resources, and directs activities to accomplish the mission. In particular, state and federal actions described in the OPLAN will be implemented in support of emergency managers and responders responsible for public safety, health, and welfare within their jurisdictions.

Eight earthquake source zones are in the central United States, two of which are in the State of Missouri. The most active zone is the NMSZ, which runs from northern Arkansas through southeast Missouri and western Tennessee and Kentucky to the Illinois side of the Ohio River Valley. Other zones also affect Missourians because of close proximity to Missouri. These are the Wabash Valley Fault, Illinois Basin, and the Nemaha Uplift. The Nemaha Uplift concerns Missourians because it runs parallel to the Missouri-Kansas border from Lincoln, Nebraska to Oklahoma City, Oklahoma. Its earthquakes are not as severe as those in the historic NMSZ, but several have affected Missouri in the past. The following Figure BP-1 highlights the impacted area according to the MAE Center NMSZ scenario.

The NMSZ is a series of faults beneath the continental crust in a weak spot known as the Reelfoot Rift. The fault system extends 150 miles southward from Cairo, Illinois, through New Madrid and Caruthersville, Missouri, down through Blytheville, Arkansas, to Marked Tree, Arkansas. It dips into Kentucky near Fulton and into Tennessee near Reelfoot Lake, and extends southeast to Dyersburg, Tennessee. It crosses five state lines and the Mississippi River in at least three places. Most notable about the NMSZ was the sequence of very large earthquakes that occurred in 1811-1812, usually referred to as the New Madrid earthquakes, after the Missouri town that was the largest settlement on the Mississippi River between St. Louis, Missouri, and Natchez, Mississippi. On the basis of the large area of damage (600,000 square kilometers), the widespread area of perceptibility (5,000,000 square kilometers), and the complex physiographic changes that occurred, the New Madrid earthquakes of 1811-1812 rank as some of the largest in the United States since European settlement. The area of strong shaking associated with these shocks is two to three times as large as that of the 1964 Alaska earthquake and 10 times as large as that of the 1906 San Francisco earthquake.

Figure BP-1 New Madrid Seismic Zone Impact Area



Because there were no seismographs in North America at that time, and very few people in the New Madrid region, the estimated magnitudes of this series of earthquakes vary considerably and depend on modern researchers' interpretations of journals, newspaper reports, and other accounts of the ground shaking and damage. The magnitudes of the three principal earthquakes of 1811-1812 described below are the preferred values taken from research involved with producing the 2008 U.S. Geological Survey (USGS) National Seismic Hazard Map (<http://pubs.usgs.gov/of/2008/1128/>).

The first principal earthquake, Magnitude (M) 7.7, occurred in northeast Arkansas on December 16, 1811. The second principal shock, M7.5, occurred in Missouri on January 23, 1812. The third principal shock, M7.7, on February 7, 1812, occurred along the Reelfoot fault in Missouri and Tennessee. The earthquake ground shaking was not limited to these principal main shocks, as evidence indicates a fairly robust aftershock sequence. The first and largest aftershock occurred on December 16, 1811, at about 7: 15 a.m. At least three other large aftershocks are inferred from historical accounts on December 16 and 17. These three events are believed to have ranged between M6.0 and 6.5 and to have been located in Arkansas and Missouri. This would amount to a total of seven earthquakes of magnitude M6.0-7.7 in the period December 16, 1811 through February 7, 1812. In total, Otto Nuttli reported more than 200 moderate to large aftershocks in the New Madrid region between December 16, 1811, and March 15, 1812: 10 of these were greater than about M6.0, about 100 were between M5.0 and 5.9, and 89 were in the M4.0 to 4.9 range. An additional 1800 earthquakes of about M3.0 to 4.0 were noted during the same period.

The first earthquake of December 16, 1811, caused only slight damage to man-made structures, mainly because of the sparse population in the epicenter area. The extent of the area that underwent damaging earth motion, at Modified Mercalli Intensity (MMI) greater than or equal to VII, is estimated to have been 600,000 square kilometers. However, shaking strong enough to alarm the general population (intensity

greater than or equal to V) occurred over an area of 2.5 million square kilometers. Today, an estimated 2,068,699.00 Missouri residents inhabit the area.

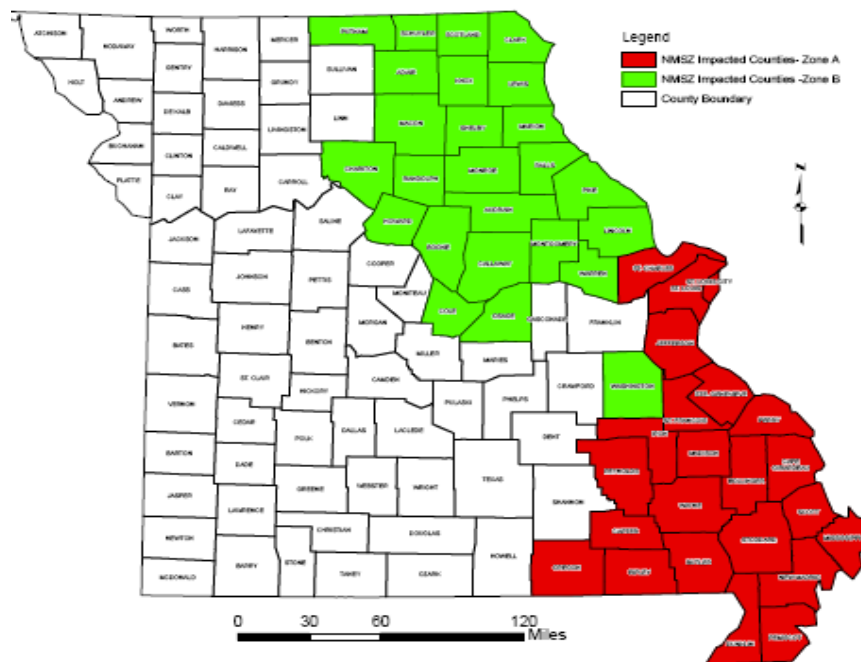
The OPLAN focuses on the following 47 Missouri counties and the City of St. Louis (listed in Table BP-1 and shown on Figure BP-2) that would be significantly impacted by a similar event. These counties would incur the most severe damage, loss of operational capability, and direct economic losses throughout the region according to New Madrid earthquake scenario models run by the MAE Center and the State of Missouri's HAZUS models.

Table BP-1 New Madrid Earthquake-Impacted Missouri Counties

▪ Adair	▪ Iron	▪ Osage	▪ St. Charles
▪ Audrain	▪ Jefferson	▪ Pemiscot	▪ St. Francois
▪ Bollinger	▪ Knox	▪ Perry	▪ St. Louis
▪ Boone	▪ Lewis	▪ Pike	▪ Ste. Genevieve
▪ Butler	▪ Lincoln	▪ Putnam	▪ Stoddard
▪ Callaway	▪ Macon	▪ Ralls	▪ Warren
▪ Cape Girardeau	▪ Madison	▪ Randolph	▪ Washington
▪ Carter	▪ Marion	▪ Reynolds	▪ Wayne
▪ Chariton	▪ Mississippi	▪ Ripley	
▪ Clark	▪ Monroe	▪ Schuyler	▪ City of St.
▪ Cole	▪ Montgomery	▪ Scotland	Louis
▪ Dunklin	▪ New Madrid	▪ Scott	
▪ Howard	▪ Oregon	▪ Shelby	

These counties would suffer significant effects directly or from regional disruption of critical infrastructure systems and short- and long-term impacts to the economy. Adjacent counties may sustain damage and require response, whereas counties in south central Missouri may be affected immediately by evacuations and other response actions. All counties in Missouri would be impacted by a New Madrid incident, though the impacts would be less severe outside the area of the designated impacted counties.

Figure BP-2 New Madrid Earthquake-Impacted Missouri Counties



1.3 Authorities

This OPLAN will not impede, override, and/or supersede any federal, state, or local departments and agencies from carrying out their specific authorities and executing their respective roles and responsibilities in accordance with applicable laws, executive orders, and directives. Throughout the response and recovery effort following a New Madrid earthquake, command and control of federal, state, or local response and recovery operations will remain the domain of the appropriate affected jurisdiction's official responsible for emergency management. The state and federal documents listed below provide the legal and regulatory framework for this OPLAN:

1.3.1 State

- Constitution of the State of Missouri, as amended
- Chapter 44, Emergency Management, Emergency Management Functions, responsibilities; emergency powers; mutual aid; Missouri Seismic Safety Commission; natural disaster volunteer program, Revised Statutes of Missouri, as amended,
- Chapter 58, Coroners and Inquests, Revised Missouri Statutes of Missouri, 2009
- Chapter 70, Powers of Political Subdivisions to Cooperate or Contract with Governmental Units, Police Protection Cooperation Between Political Subdivisions, Revised Statutes of Missouri, 2009
- Chapter 160.451-160.457, Schools-General Provisions, Earthquake Emergency Procedure, Revised Statutes of Missouri, 2009
- Chapter 256, Geology, Water Resources and Geodetic Survey, Interstate Earthquake Emergency Compact and Geologic Hazard Assessment, Revised Statutes of Missouri, 2009
- Chapter 260, Environmental Control, Hazardous Waste Management, Revised Statutes of Missouri, 2009
- Chapter 267, Authority of State Veterinarian, Revised Statutes of Missouri, 2009
- Chapter 269, Disposal of Dead Animals, Revised Statutes of Missouri, 2009
- Chapter 273, Animal Care Facility Act – regulates animal shelters and kennels

- Chapter 292, Health and Safety of Employees, Missouri Emergency Response Commission – MERC, Revised Statutes of Missouri, 2009
- Chapter 304.22, Emergency Management Vehicles, Revised Statutes of Missouri, 2009
- Chapter 319, General Safety Requirements, Pipelines, Seismic Building Ordinances, Revised Statutes of Missouri, 2009
- Chapter 320, Fire Protection, Emergency Services, Revised Statutes of Missouri, 2009
- Chapter 21, Joint committee on terrorism, bioterrorism and homeland security, Revised Statutes of Missouri, 2009
- Emergency Management Assistance Compact

1.3.2 Federal Authorities

- Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288 (as amended at 42 *United States Code* [U.S.C.] § 5121-5207)
- Post-Katrina Emergency Management Reform Act (PKEMRA) of 2006, Pub. L. No. 109-295
- Executive Order 12148(as amended by Exec. Order No. 12155, 12156, 12319, 12356, 12379, 12381, and 1267)
- Defense Production Act (DPA) of 1950 (as amended at 50 U.S.C. Appx § 2061-2172)
- Pet Evacuation and Transportation Standards Act of 2006, Pub. L. No. 109-308
- Public Health Service Act, 58 Stat. 682, (codified as amended at 42 U.S.C. § 201, et seq.)
- Pandemic and All-Hazards Preparedness Act, Pub. L. No. 109-417
- Federal Power Act, 16 U.S.C. § 791a-828c
- Authorities of the U.S. Department of Transportation (USDOT) 49 U.S.C. § 102 (see generally Title 49 U.S.C.)
- Authorities of the Federal Aviation Administration (FAA), 49 U.S.C. § 106 (see also generally Title 49 U.S.C. Subtitle VII Aviation Programs)
- Authorities of the Federal Railroad Administration 49 U.S.C. § 103 (see also generally Title 49 U.S.C. Subtitle V Rail Programs and Subtitle IV Part A Interstate Transportation... Rail and of particular note 49 U.S.C. § 11123)
- Authorities of the Federal Transit Administration 49 U.S.C. § 107 (see also generally Title 49 U.S.C. Subtitle III, Chapter 53 Public Transportation)
- Ports and Waterways Safety Act of 1972, Pub. L. No. 92-340 (codified as amended at 33 U.S.C. §1221-1236)
- Comprehensive Environmental Response, Compensation, and Liability Act, Pub. L. No. 96-510 (codified as amended at 42 U.S.C. §§ 9601-9675)
- Federal Water Pollution Control Act (Clean Water Act), 62 Stat. 1155 (codified as amended at 33 U.S.C. § 1251-1387)
- Economy Act, 31 U.S.C. § 1535
- Posse Comitatus Act, 18 U.S.C. § 1385
- National Emergencies Act, Pub. L. No. 94-412 (as amended at 50 U.S.C. § 1601-1641)
- Homeland Security Presidential Directive 5, Domestic Incident Management, (February 2005)
- Homeland Security Presidential Directive 7, Critical Infrastructure, (December 2003)
- Homeland Security Presidential Directive 8, National Preparedness, (December 2003)
- Conservation of Power and Water Resources, 18 *Code of Federal Regulations* (CFR) Part 1-390 (2010)
- Navigation and Navigable Waters, 33 CFR Part 1-399 (2009)
- Emergency Management and Assistance, 44 CFR Part 101-362 (2009)
- Transportation, 49 CFR (2009)
- National Strategy for Homeland Security, 2002
- Executive Order 12148 – Federal Emergency Management, as amended
- Homeland Security Act of 2002, Pub. L. No. 107-296 (codified as amended at 6 U.S.C. § 101-1405)

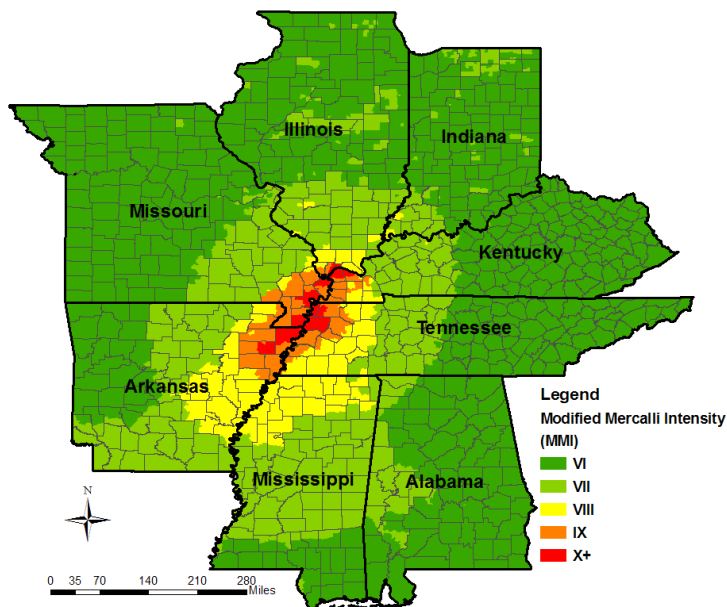
- Titles 10, 32, and 44, CFR
- Defense Production Act of 1950
- Victims of Crime Act (VOCA) 42 U.S.C. 10601-10608
- Occupational Safety and Health Act of 1970
- Aviation and Transportation Act of 2001

- Programs and References:
 - National Strategy for Homeland Security, October 2007
 - NRF, January 2008
 - Catastrophic Incident Annex, November 2008
 - NIMS, August 2008
 - FEMA Incident Management Handbook, 2009
 - FEMA Integrated Operations and Logistics Guidance, April 2009
 - National Infrastructure Protection Program , 2009
 - Comprehensive Preparedness Guide 101, March 2009
 - Regional Planning Guide, March, 2010
 - National Earthquake Hazards Reduction Program (NEHRP)
 - Incident Management and Support Keystone, July 2010 – Operational Draft
 - Catastrophic Incident Supplement to the Catastrophic Incident Annex
 - MAE Center Phase II Report

1.4 Threat

The NMSZ is active, averaging per year more than 200 measured events (M_w 1.0) and tremors strong enough to be felt (M_w 2.5-3.0). About every 18 months, the fault releases a shock of M_w 4.0 or more, capable of minor local damage; about once per decade, a M_w 5.0 or greater occurs with significant accompanying damage, and can be felt in several states. A damaging NMSZ earthquake, M_w 6.0 or greater, recurs about every 80 years; the last one occurred in 1895. Figure BP-3 shows areas within the wider region expected to undergo different levels of shaking intensity at the respective various levels of MMI.

Figure BP-3 NMSZ Regional Expected Shaking Intensity



In 2002, the USGS released new earthquake probabilities for the NMSZ. Within the next 50 years, a 25-40% chance for an M_w 6.0 or greater earthquake along the NMSZ fault line is estimated. The results would cause serious damage to infrastructure and masonry buildings from Memphis, Tennessee, to St. Louis, Missouri. The New Madrid earthquake series that occurred in 1811 and 1812 included some of the largest earthquakes in U.S. history, with estimated main shock moment magnitudes of 7 to 8 and several hundreds of aftershocks. The land was destroyed in the Missouri Bootheel, making it unfit for farming for many years. It was the largest burst of seismic energy east of the Rocky Mountains in U.S. history and was several times larger than the Alaska earthquake of 1964 and San Francisco earthquake of 1906.

Based on MAE Center damage predictions for a catastrophic incident, the characteristics of the earthquake presumed in the development of this OPLAN are:

- On February 2nd at 0700 hours, a M_w 7.7 earthquake occurs along the New Madrid fault line.
- Aftershocks are likely and will occur in the hours and days following the main incident.
- Though an aftershock is unlikely to occur at the same magnitude as the main shock, aftershocks with magnitudes of M_w 6, are possible, if not probable.
- The earthquake ruptures one arm of the New Madrid Fault Line over a distance of several miles, generating intense shaking in western Kentucky, Tennessee, southeastern Missouri, northeastern Arkansas, and southern Illinois, with localized amplification of ground shaking due to variations in soil conditions.
- Severe ground shaking and damages are expected in 22 Missouri counties (MMI VII or greater), extending from the Missouri boot-heel counties in the south to north of, and including, the City of Saint Louis and across eastern Missouri. These counties are estimated to incur the most severe damage, with loss of operational capability and direct economic losses throughout the region.
- The earthquake is an estimated M_w 7.7 with an instrumental intensity of VI (moderate shaking/moderate damage) to IX (violent shaking/heavy damage) in widespread areas of the most severely affected counties. Pockets within the affected counties experience instrument intensity of X+ (extreme shaking/very heavy damage) in the areas immediately adjacent to the fault where liquefaction is likely to occur.
- Damage will be catastrophic in the areas that experience shaking intensities of IX and X and high or very high liquefaction (i.e., areas within the “Bootheel” and adjacent to the Missouri and Mississippi Rivers). Figure BP-4 shows the levels of shaking intensity in Missouri expected as a result of the earthquake. Figure BP-5 displays Missouri liquefaction zones.
- Catastrophic damage is expected in 16 Missouri counties (MMI VIII or greater) and the urban areas of Cape Girardeau, Poplar Bluff, Sikeston, and St. Louis.
- Threats and hazards resulting from shaking, faulting, and liquefaction include:
 - Structural and nonstructural damage to buildings and infrastructure including widespread collapse of buildings
 - Widespread ignition of fires
 - Subsidence and loss of soil-bearing capacity particularly in areas of liquefaction
 - Widespread occurrence of landslides
 - Hazardous materials spills and incidents
 - Dam/levee failure resulting in flooding
 - Sand blows
- Threats and hazards resulting from the main shock will be aggravated or recur during aftershocks that will continue for months after the main shock.
- According to the MAE Center data, the major impacts of the earthquake expected in the 22 Missouri counties most severely affected are as follows:

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- 6.5 million tons of debris created including about 2.9 million tons of brick, wood, and other debris, and about 3.6 million tons of steel and concrete. Within this debris, white goods, hazardous materials, and other debris would require attention because of risk/damage they would pose to humans and the environment.
- Potable water service needed (liters):
 - Day 1: 90,222
 - Day 2: 90,222
 - Day 3: 2,526,006
 - 3-Day Total: 2,706,450
- Food service needed (shelf stable meals):
 - Day 1: 57,702
 - Day 2: 57,702
 - Day 3: 1,684,004
 - 3-Day Total: 1,799,408
- Ice needed (pounds):
 - Day 1: 230,808
 - Day 2: 230,808
 - Day 3: 6,736,016
 - 3-Day Total: 7,197,632
- Number of households without water:
 - Day 1: 123,719
- Number of households without electric power:
 - Day 1: 302,173
- 87,000 buildings damaged; 44,000 buildings completely destroyed including the following critical infrastructure:
 - 7 hospitals
 - 69 fire stations
 - 53 police stations
 - 136 schools
 - 1,004 bridges
 - 28 airports
 - 51 ports
 - 23 railroad facilities
 - 2 railroad bridges
 - 55 dams
 - 25 levees
 - 29 hazardous material facilities
- 14,125 people with casualties
- 686 fatalities
- 842,002 displaced individuals (assuming an average of 2.7 persons per household)
- Number of people requiring emergency shelter:
 - Day 1: 30,074
 - Day 3: 237,991
 - Projected Shelter Capacity: 907,303
 - 129,191 pets (dogs and cats) requiring shelter

Additional damage predictions for the remaining 25 counties are not covered in the MAE Center modeling. However, the same operational considerations used for the MAE Center counties were

applied throughout this OPLAN. This was deemed necessary because the actual location of an earthquake's epicenter is impossible to predict.

Figure BP-4 Missouri Expected Shaking Intensity

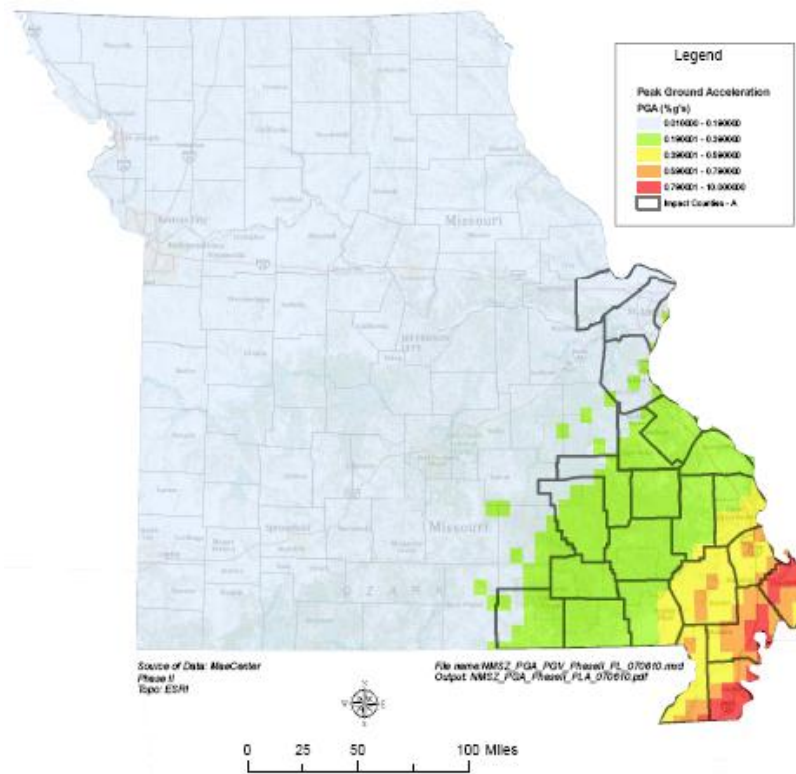
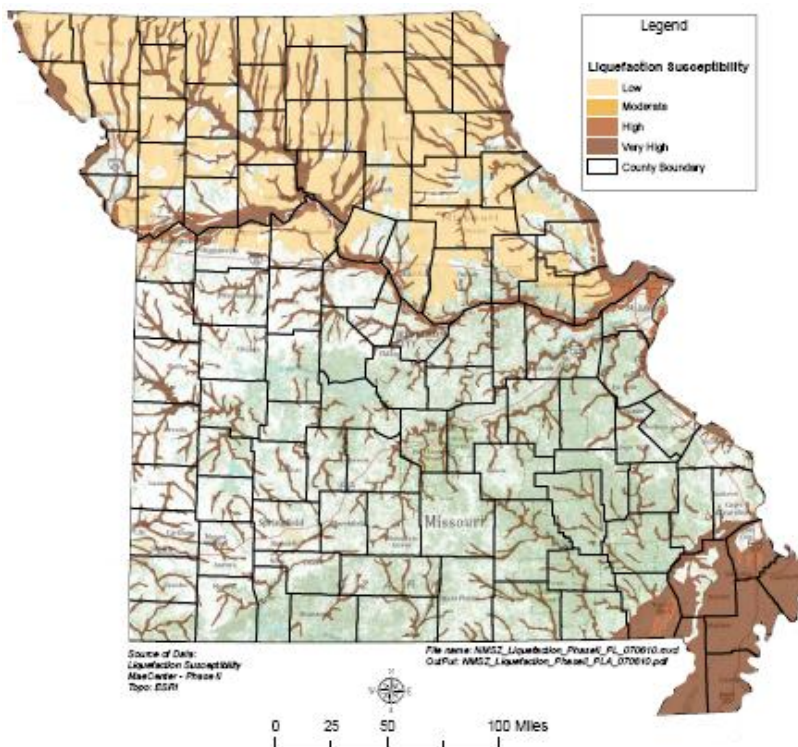


Figure BP-5 Missouri Liquefaction Zones



1.5 Critical Considerations

All considerations listed in the SEOP and RAHP pertain to this OPLAN. In addition, the following specific factors should be considered during implementation of this OPLAN:

- The State of Missouri will be immediately overwhelmed with continuity of government issues, as some local governments will be severely compromised. FEMA Region VII support will be needed immediately to coordinate federal response operations and resources.
- Mass casualties are possible, as well as serious damage to infrastructure such as highways, bridges, pipelines, communication systems, and utilities. Damage to infrastructure may cause cascading secondary impacts and threats such as fires, explosions, landslides, dam/levee failure, flooding, and chemical releases/hazardous materials incidents.
- Physical injuries and psychological distress will occur in both urban and rural areas of Missouri. Local emergency responders will be overwhelmed by the surge of injuries. In addition, injured residents may not be reached for several hours due to transportation, communications, and infrastructure damage.
- Basic services and resources relied on by residents in affected areas will be significantly disrupted. Hospitals and healthcare, transportation, water, sewer, electricity, natural gas utilities, and petroleum products and food outlets will not be available in some areas.
- A surge of existing and new occurrences of physical and psychological concerns are expected to strain medical resources at hospitals and shelters across the impacted areas and supporting counties.

- Individuals with physical injuries and psychological needs will also require pharmaceutical services.
- Hospital and nursing home facilities in the affected areas may need to be evacuated.
- FEMA Regions IV, V, VI, and VII will rely on the same response resources. Thus, coordination among the NMSZ Regions and the National Response Coordination Center (NRCC) will be a necessary and critical component to ensure that response operations are integrated and resources are used in the most effective manner possible.
- Type I search and rescue (S&R) resources in Missouri are limited to Missouri Task Force 1 based in Boone County, Missouri. Additional search and rescue resources will be needed to augment Missouri assets and will be deployed geographically based on need.
- Federal support will be needed to augment state and local mass fatality operations. Limited capabilities, resources, and storage facilities are available among state and local governments to store and process human remains. Post-mortem processing of human remains will require cultural sensitivity and respectful care.
- Memorandums of Understanding (MOU) among Missouri and the other Region VII support states (Iowa, Kansas, and Nebraska) will be in effect for certain resources. These four states and other states will respond via Emergency Management Assistance Compact (EMAC) requests.
- Initial situational awareness in the impacted areas may be difficult to obtain because infrastructure and communications will be damaged by the earthquake. Thus, initial response will be managed in accordance with automatic response triggers specified in Section 3.2.1 of this OPLAN.
- Several factors including time of day, epicenter, magnitude, duration, and aftershocks will compromise response operations. Seasonal weather conditions will significantly impact operations as well.
- Some aftershocks may exceed the initial earthquake in duration and intensity.
- Lack of earthquake-resistant building codes and a high percentage of aged, unreinforced masonry buildings and structures may necessitate immediate sheltering needs.
- Civil unrest and looting may be a major threat in urban areas.
- Local governments have primary responsibility to prepare for and respond to incidents and disasters. As such, local jurisdictions must be prepared to manage initial emergency activities for at least the first 96 hours through internal capabilities and/or mutual aid agreements regardless of the size and scope of the incident. State and Federal Governments will make every effort to provide additional life safety support as quickly as possible; however, state and federal resources may not be available in the early stages of an emergency.

1.6 Critical Assumptions

All assumptions listed in the SEOP and RAHP also pertain to this OPLAN. In addition, the following national and regional assumptions should be considered during implementation of this OPLAN:

1.6.1 National Assumptions

- Modeling used for this NMSZ incident will be sufficiently representative of a worst-case scenario in order to identify required resources for each state.
- Federal support will be required and must be provided quickly to save lives, reduce human suffering, and reduce damage to property. This will require mobilization and deployment of teams and commodities before these are requested by states.

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- A detailed and credible Common Operating Picture (COP) will not be achievable until 24-72 hours after the incident. Consequently, response operations must begin without the benefit of a detailed assessment of the situation and critical needs.
- The Secretary of Homeland Security (SECDHS) will direct implementation of the Catastrophic Incident Supplement (CIS).
- The President will immediately declare a major disaster to make federal assistance available to each of the eight states in the NMSZ. Each of the eight states in the NMSZ will require a Joint Field Office (JFO).
- Cascading effects, such as disruption to the energy and transportation sectors, flooding, and so on will result in impacts outside the NMSZ. Other states will also qualify for Presidential declarations as a result of these secondary effects.
- All FEMA regional offices in the NMSZ will remain fully operational. No regional offices will sustain any direct damage from a NMSZ earthquake.
- Large-scale evacuations, both organized and self-directed, will occur.
- Existing health care facilities in the impacted area are expected to be quickly overwhelmed, requiring evacuation of existing patients from these facilities to accommodate increased patient workload.
- Aftershocks potentially as large as, or larger than, the initial earthquake will occur for many months. Multiple incidents will occur simultaneously or sequentially in contiguous and/or noncontiguous areas.
- Cascading effects such as fires and dam/levee breaches will cause significant follow-on damage, potentially compromising the safety of response and recovery personnel and degrading the response effort both in time and scope.
- Nationwide, other ongoing disasters will occur at the time of this incident. The Federal Government will have to support these operations while concurrently responding to a NMSZ event, which will decrease the capability of the United States Government to meet all NMSZ disaster response needs.
- International support will be required for response operations. For an effective response, procedures to integrate international support into the response effort will have to be established as a priority.
- Areas specified with “High” or “Very High” liquefaction susceptibility pose safety risks for responders, and will be used only as staging areas and for response activities as a last resort.
- Unique, non-traditional public information/public education methodologies will be required to communicate with the general public, media, congressional members, local officials, the private sector, and international interests within and outside of the impact area.
- Response capabilities at all levels will be limited due to damage to emergency facilities and equipment, and impact to personnel.
- Communications systems will likely be down, and alternative resources will be used.
- Affected residents and their pets will try to shelter in place as long as possible and will require stabilization services and eventually evacuation support. People will choose to shelter in both affected and unaffected areas.
- Critical infrastructure (Agriculture, Food, Commercial Facilities, Dams, Energy, Information and Telecommunications, Postal and Shipping, Banking and Finance, Communications, Defense

Industrial Base, Government Facilities, Nation Monuments and Icons, Transportation Systems, Chemical Industry, Critical Manufacturing, Emergency Services, HealthCare and Public Health, Nuclear Reactors, and Water) will be compromised.

- Debris clearance resource needs will exceed state and local governmental capabilities, and will impede response.
- Fuel will be difficult to obtain.
- Banking and financial institutions will not be fully operational, causing an increase in demand for life sustaining commodities and resources.
- A shortage of first responders is expected.
- Seasonal weather conditions will affect every aspect of response.
- Need for livestock and animal care is expected.
- Transportation lifelines, such as air, highways, water, and rail will be impacted by the initial earthquake and following aftershocks, making ground travel and response efforts extremely challenging, dangerous, or impossible.
- The general public will expect federal resources to come to the immediate aid of local and state governments in response to all requests for assistance.
- If any region is activated due to a NMSZ event, all NMSZ regions will activate in anticipation that they will be affected by the event, as the scenario forecasts.

1.6.2 Region VII and State of Missouri Assumptions

- Little or no warning will precede a catastrophic NMSZ earthquake.
- Lifesaving and life-sustaining efforts will be the primary mission of initial disaster operations.
- System interdependencies (food, fuel, electricity, water, sewage, and communications) will be negatively impacted.
- The Governor of the State of Missouri will immediately proclaim a State of Emergency and request the President to declare a disaster. Local emergency proclamations will also be made either verbally or in writing.
- The NRF and CIS will be activated by DHS/FEMA Headquarters to allow mobilization of federal resources.
- This incident will involve a multi-regional response including support and resources from, and potential impacts to, neighboring states. SEMA will activate EMAC, and established mutual aid agreements will be honored to the extent possible.
- The Region VII Regional Response Coordination Center (RRCC) and the Missouri State Emergency Operations Center (SEOC) will not be damaged by the earthquake and will be fully operational.
- The Region VII RRCC will immediately activate to Level I (Refer to Alert and Activation thresholds in Section 3.2.2) upon notification of a potential catastrophic earthquake in the NMSZ, in order to assess the situation and mobilize federal resources. RRCC operations will mirror those of the SEOC during initial response.
- All local emergency operations centers (EOC) in the affected area will undergo varying levels of damage and will or will not be operational. All other local government functions in the affected area will be severely compromised or focused entirely on response to the earthquake.

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- The response capabilities and resources of Missouri and local jurisdictions will be insufficient, overwhelmed, and exhausted.
- The hardest hit areas in both urban and rural areas will be isolated from re-supply by fixed-wing aviation and ground transportation. Numerous rotary wing aviation resources will be needed to access cut-off areas.
- The number of casualties and/or displaced persons will be large, possibly in the tens to hundreds of thousands.
- Untrained volunteers will conduct spontaneous S&R operations autonomously and will become secondary victims.
- Local and state triage and treatment capabilities will be overwhelmed in the disaster area, and patient evacuation from hospitals will be necessary.
- Debris generated by the earthquake will isolate population centers and hamper all facets of response operations.
- Primary transportation infrastructure including highways, rails, and airports will be disrupted.
- Utilities services including electric, natural gas, water, sewer, and sanitation will be disrupted.
- Roadways to and from the impacted areas in Missouri will be affected, disrupting the flow of response and relief commodities.
- Delivery of essential commodities such as food, medicine, and fuel will be disrupted.
- Local and state law enforcement will be insufficient to maintain order in the affected regions.
- First responders and emergency management personnel at the local level will be victims of the incident.
- Fire-based responders from local jurisdiction will comprise the majority of the State's Emergency Support Function (ESF)-4, -9, and -10 resources. In addition, fire-based emergency medical services and incident management teams will be prevalent statewide. While the individuals will have been cross-trained to support firefighting, search and rescue, hazardous material response, and emergency medical services (EMS), individuals will not be able to concurrently support multiple ESF objectives.
- FEMA Region VII and the State of Missouri will coordinate response operations with each other to ensure assistance and resources to local jurisdictions are maximized and utilized in the most efficient way possible.
- Media response will be significant and extensive.
- Other co-incident events in Region VII and/or other areas of the United States will not impact the execution of this OPLAN but will cause competition for resources among Region VII states and other Regions.
- Commercial airports will be operational outside the immediate NMSZ area; and flights and vehicle rentals will be available for responding.
- Local jurisdictions must be prepared to manage initial emergency activities for at least the first 96 hours through internal capabilities and/or mutual aid agreements, regardless of the size and scope of the incident.
- Shelters identified for use during other natural disasters may not be available in the impacted area. Temporary sheltering in campers and tents may be determined the safest option until buildings and residences are inspected. Prudent and safe actions must be taken into consideration

whether the public remains in their residences or utilizes temporary shelters. Sheltering may take place outside the impacted area.

- A number of people will self-evacuate the damaged area if possible, while many others will stay for a variety of reasons, including protecting property or caring for farm/companion animals. If evacuation is directed by local governments, state agencies will attempt to facilitate movement through activation of the evacuation management team.

1.7 Objectives and Mission-Essential Tasks

As part of the development of the OPLAN, SEMA and FEMA identified local and regional objectives. The objectives cover the period immediately after the earthquake occurs to 120+ hours after the earthquake (Event [E] to 120+ hours). After 120 hours, it is expected the Joint Planning Section will disseminate an IAP with updated objectives. All operations specified within this OPLAN are associated with one of the following response phases:

- Phase 2a: Immediate Response: E to E+24 hours
- Phase 2b: Deployment: E+24 hours to E+72 hours
- Phase 2c: Employment/Sustained Response: E+72 hours to E+120 hours and beyond



Response objectives are defined as the essential challenges that must be addressed to initiate the response strategy and achieve mission success. For purposes of the OPLAN, activities focus on operational response objectives to achieve strategic response objectives such as lifesaving, life safety, and property protection. See Annex C for more specific information about execution.

1.7.1 Immediate Response Operational Objectives

These following objectives will be the primary focus of the first 24 hours of response:

- **Establish incident organization and coordination.** A joint organizational architecture for incident direction and control will enable successful operational outcomes for the other response objectives. This will be facilitated through incident action planning, coordination of operations, logistics management, and planning.
- **Establish and maintain interoperable emergency communications.** Deployment of emergency interoperable communications assets will be necessary to support the incident response organizations and to reestablish regional communications.
- **Prioritize and conduct S&R operations.** Specialized lifesaving assistance associated with Urban Search and Rescue (US&R), waterborne S&R, and inland/wilderness S&R operations will be a premium.
- **Conduct hazardous material response and firefighting operations.** Resources will be deployed to assess, respond to, mitigate, and eliminate threats to public safety including hazardous materials spills and releases, debris, damaged structures, and potential public health threats. Additionally, fires and structural damage, particularly in urban areas, will require extensive structural firefighting resources.

- **Conduct emergency debris clearance.** Re-establishment of transportation routes to facilitate movement of resources into the most severely affected areas will be necessary, as will the ability to move injured people, evacuees, and others out of the affected areas. Significant, debris clearance within heavily impacted urban areas will also be necessary.
- **Establish lines of supply and transportation.** Movement of resources into the affected area will be significantly affected by damage to transportation infrastructure. It will be necessary to establish and maintain land and air routes to move first responders and other resources into the initial response and affected areas.
- **Provide mass care for the displaced population including household pets.** Expected requirements for sheltering will exceed potential shelter capacities. This situation will be exacerbated by potential structural damage to buildings pre-identified as shelters. Shelters, feeding operations, and distribution of water and other supplies will be implemented to sustain the population. Additionally, expected requirements to care for thousands of displaced and abandoned companion animals will exceed current capabilities of the Missouri Humane Society.
- **Establish emergency medical and public health operations.** The number of injuries will far exceed available resources for medical treatment. It will be necessary to move medical personnel and supplies into the affected area to supplement local medical response resources, and to evacuate patients who cannot be treated appropriately, given the available resources within the affected area.

1.7.2 Secondary Response Operational Objectives

Along with the ongoing activities associated with the primary response objectives, secondary objectives for operational periods covering 24 to 72 hours post-earthquake are as follows:

- **Conduct initial damage and safety assessment.** Surveying the impacted area will be a critical first step to define the area of impact, determine resources needs, and develop incident objectives.
- **Provide security for the general population and first responders.** Law enforcement resources, particularly in urban areas, will be necessary to conduct life-safety, security, and public order operations.
- **Restore critical infrastructure and public services.** The initial restoration of critical infrastructure and public services in less affected areas will be essential to support first responders and accommodate incident survivors.
- **Disseminate emergency public information and warning.** The media's (radio, television, newspaper, and Internet) ability to disseminate public information within the affected area will be greatly reduced by station inoperability, loss of power, and reduced staff. Public affairs personnel will have to rely heavily on available means and non-traditional delivery methods. Additionally, national and international media interest will be extreme.
- **Obtain, deliver, and track resources to establish and maintain response operations.** The need to provide emergency supplies (fuel, commodities, and portable power supplies) will be a priority to support response operations. Considerable resources will be necessary to transport, generate, conserve, and distribute resources necessary to support essential services.

1.7.3 Tertiary Response Operational Objectives

Along with the ongoing activities associated with the primary and secondary response objectives, the following tertiary objectives will be the focus for operational periods covering 72 + hours post-earthquake:

- **Provide evacuation support.** Movement of people and their pets out of the affected area will be significantly affected by damage to transportation infrastructure. In order to move the injured and evacuees, establishment and maintenance of land and air routes will be necessary.
- **Maintain continuity of local government within the affected area.** Damage to government facilities and the death of key personnel will limit local jurisdictions' capabilities to sustain government operations. It may be necessary to provide state personnel resources to re-establish government on the local jurisdictions' behalf.
- **Conduct mass fatality operations.** Resources will be necessary to recover, transport, store, and process the remains of the deceased.

1.7.4 Relevant Capabilities

As part of the development of the OPLAN, SEMA and FEMA identified the local and regional capabilities likely to be needed after a catastrophic earthquake. Projected major unmet needs at each level of government were also identified. The capabilities summarized below and organized according to the DHS Target Capabilities List (TCL) were identified at the various operational levels. See Annex C for more specific information about local, state, and federal capabilities.

- **Planning** – All Missouri counties have local emergency operations plans (LEOP) in compliance with Missouri revised statutes. The State of Missouri has developed and will use the SEOP, while at the federal level; FEMA Region VII will use the RAHP and this OPLAN. This OPLAN will unify joint state and federal operations in response to a NMSZ earthquake.
- **Onsite Incident Management** – Local capabilities for onsite incident management are robust and generally well-organized but will be challenged by the scope and magnitude of the incident, damage to transportation infrastructure, and communications difficulties. Some local governments will be immediately overwhelmed with continuity of government issues in some local jurisdictions. Mutual aid and state resources will supplement local resources with Incident Management Teams, but deployment of these teams will be adversely affected by damage to transportation infrastructure.
- **EOC Management** – The SEOC, State Area Coordination Center (SACC) locations, and some local EOCs should survive the earthquake but will suffer degradation of functionality from secondary impacts. Other local EOCs will be totally devastated by the earthquake's impacts.
- **Communications** – Local and state emergency communications systems within the impacted area will be compromised, but redundancies within state systems should provide limited capability for continued communication on a regional basis. Basic commercial communication systems, especially those relying on cable, will suffer the most damage.
- **S&R** – More than 43,800 structures will be completely damaged and will need to be searched, as people are expected to be trapped in collapsed buildings and require rescue. Thousands more will be stranded in damaged buildings such as high-rises. Mutual aid S&R resources will not be sufficient to meet the required rescue missions; nor will federal US&R resources in Missouri be adequate. Resources from other regions will be provided through the Statewide Mutual Aid system but will have difficulty reaching hardest hit areas initially due to damage to transportation infrastructure. Damage to high-rise buildings in downtown St. Louis will result in extensive search and rescue efforts.
- **Firefighting Operations and Support** – Fires are likely to be ignited in the aftermath of the earthquake. Local and mutual aid fire/rescue resources will not be sufficient to meet immediate needs due to the number of ignitions and rescue missions and damage to infrastructure. Statewide mutual aid will provide resources but will have difficulty reaching hardest hit areas initially due to damage to transportation infrastructure. Fires will burn for extended periods.

- **Citizen Protection: Evacuation, In-place Protection** – Local evacuations will be required due to fires, hazardous materials incidents, and emerging public health emergencies stemming from lack of water and sanitation. Possibly, the earthquake will compromise or destroy the structural integrity of one or more dams, resulting in need to evacuate people from the floodplain below. Local authorities, supplemented by state law enforcement, will have sufficient resources for command/control, but resources will be required for traffic control, transportation, and sheltering of evacuees. Evacuation operations will be adversely affected by damage to transportation infrastructure including roads, bridges, airports, and port facilities.
- **Mass Care** – The National Shelter System database lists suitable emergency shelters in the State with a combined capacity to house more than approximately 43,247 displaced individuals. Additional smaller shelters statewide are available but expected to be logistically unsustainable. Thus, only shelters with a capacity of 500 or more in the unaffected areas of the State are considered. Given that more than 237,991 people may require shelter at the peak, a significant shortfall is anticipated in actual shelter capacity. Individual Assistance (IA)-Technical Assistance Contracts (TAC) Base Camps for victims will be required.
- **Critical Resource Logistics and Distribution** – Approximately 842,002 people will require feeding and other commodities due to lack of services, loss of residence, or stranded visitors. Stockpiles of critical commodities are limited. Supplies by contractors and distribution of these supplies will be severely compromised by overwhelming needs and damages to transportation infrastructure. The State and some local governments have identified staging areas and other support locations, but this information is not formally documented in plans on a consistent basis.
- **Structural Damage and Assessment** – Local public works departments and contractor resources will not be sufficient to meet immediate demand for emergency debris removal or to establish sites for staging, reduction, and recycling. Up to 6.5 million tons of debris, consisting of building materials, personal property, and sediment, will be generated by the earthquake. Demolition of damaged structures will continue to create high demand for contractor resources as recovery proceeds. Similarly, public and contractor assessment/inspection resources will be overwhelmed and dependent on engineers/inspectors from outside the region for rapid assessments of structural damage to critical facilities, infrastructure, housing, and commercial structures. Deployment of Missouri Structural Assessment & Visual Evaluation (SAVE) Coalition volunteers from other regions will be delayed by damage to transportation infrastructure.
- **Emergency Public Information and Warning** – The private-sector media resources such as television and radio stations commonly used by Public Information Officers (PIO) will likely be affected negatively. PIOs will have to use alternate communication strategies to disseminate information.
- **Public Safety and Security Response** – Local and state law enforcement mutual aid resources will not be sufficient to meet immediate needs. Statewide mutual aid (more than 13,509 sworn personnel) and the Missouri National Guard (MONG) will provide resources but will have difficulty reaching hardest hit areas initially due to damage to transportation infrastructure.
- **Restoration of Lifelines** – Lifelines are defined as water, wastewater, power, natural gas, telecommunication, fuel distribution, and transportation systems. Power restoration is likely to be relatively rapid in all but the hardest hit areas. Major water and sewer facilities will require significant repairs. Damage to distribution (water, natural gas, and petroleum) and collection (sewer) systems may take months, requiring temporary systems.
- **Volunteer Management and Donations** – Some jurisdictions have developed plans to integrate volunteer resources and manage donations. The systems are not widely used by jurisdictions within the impacted area.

- **Triage and Pre-hospital Treatment** – Approximately 14,125 people will require medical treatment; of those, 3,257 will require hospitalization. EMS resources within fire departments will be devoted to firefighting and rescue missions. Damage to transportation infrastructure will limit the influx of resources and movement of victims. On-hand medical supplies will be exhausted within 48 hours. Many individuals will not have access to medical treatment during the first 72 hours after the earthquake. Disaster Medical Assistance Teams (DMAT) will be required.
- **Medical Surge** – An estimated seven hospitals and other healthcare facilities in the hardest hit areas will suffer major structural damage, severely limiting treatment capabilities. Healthcare facility operations will be further affected by limited (24-hour) supplies of generator fuel and lack of water. Damage to transportation infrastructure will limit influx of medical personnel and resources, and evacuation of patients. Hospitals in less severely impacted areas and outlying counties will be able to take patients. As much as 90 percent of the hospital beds in the five hardest hit counties may not be available due to damage to buildings and support infrastructure.
- **Medical Supplies Management and Distribution** – Local hospitals and other health-care facilities will immediately experience shortages of supplies due to demand and relatively limited onsite inventories. Medical treatment facilities typically carry 2 days of supplies. Re-supply will be limited by damage to transportation infrastructure.
- **Fatality Management** – HAZUS-MH estimates the number of fatalities at 687. Local coroner/medical examiner resources and resources available through mutual aid will be overwhelmed by the number of fatalities and the requirements for transportation, storage, identification, and coordination with families, both immediately and long-term. Resources from other states will be deployed through EMAC but will have difficulty reaching the affected area due to damage to infrastructure.
- **Responder Safety and Health** – Environmental degradation is likely to occur, resulting in significant physical hazards followed by civil unrest. Both will make responder health and safety a concern and will delay or disrupt response operations.
- **Animal Health Emergency Support** – Local public and nongovernmental resources for animal care will be overwhelmed by requirements to shelter as many as 129,191 animals including companion animals that accompany evacuees who seek shelter, and abandoned animals that require rescue. In major agricultural areas such as the Bootheel, a severe need for evacuation and sheltering of livestock is not anticipated because the area is intensively cropped with rice and cotton. Disruptions to power, water, and transportation systems will adversely affect local livestock operations.

2 Mission

The State of Missouri and FEMA Region VII will work together to provide joint support and coordination of operations and resources to save and sustain life, minimize suffering, stabilize and restore critical infrastructure as well as supplement state, local, regional and private sector efforts immediately following a catastrophic earthquake along the NMSZ to alleviate the consequences of the incident and foster recovery.

3 Execution

This section describes the execution of the joint state/federal response. Additional details regarding specific functional areas are in Annex A, Direction and Control.

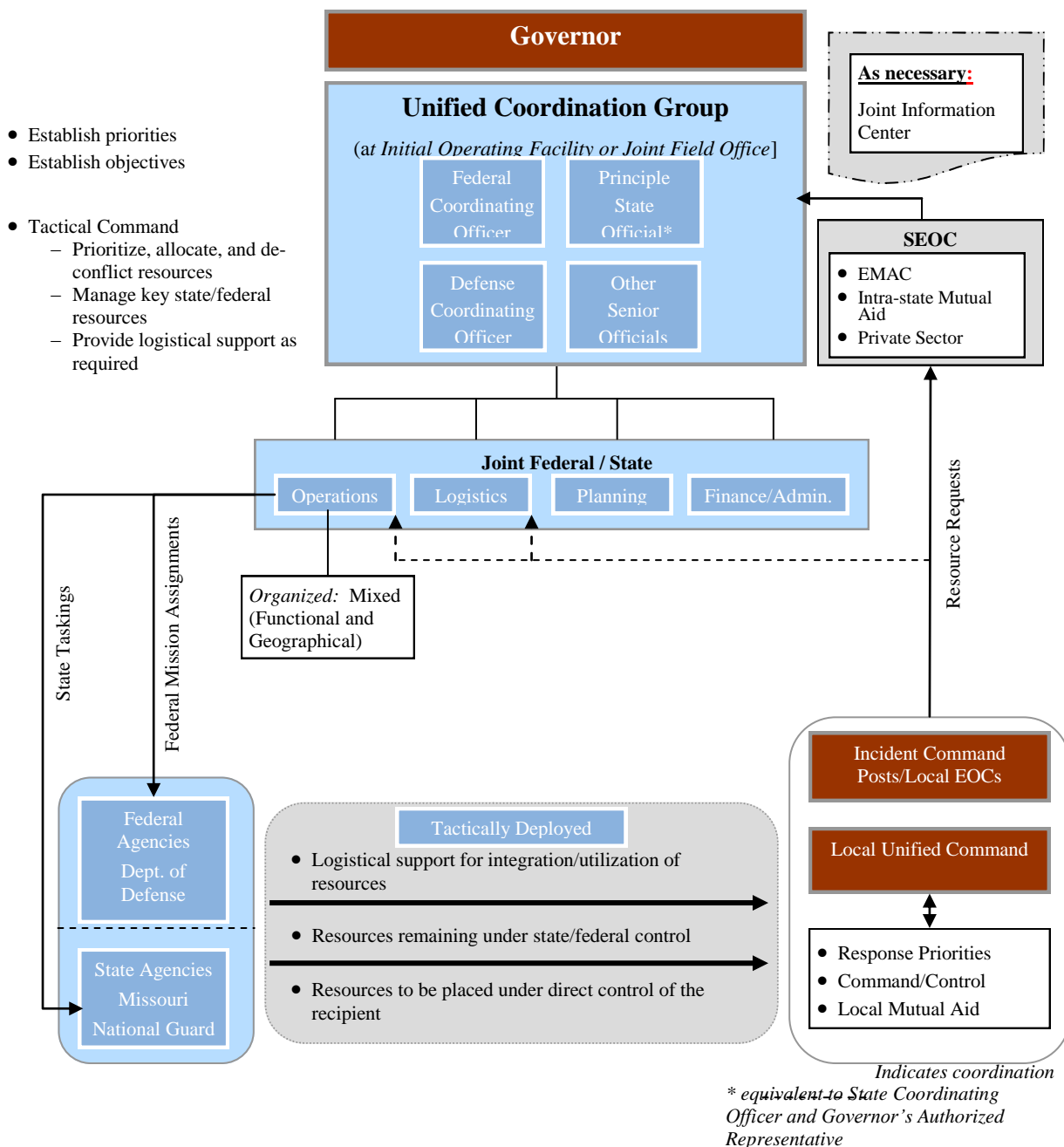
3.1 Senior Leaders' Intent

The Senior Leaders Steering Committee ensures a joint state/federal operational framework designed to support the Governor's priorities and operationally aligned to ensure collective unity of effort to protect the citizens of Missouri. To achieve this, the Missouri OPLAN will:

1. Formalize the concept of employing a joint state/federal Unified Coordination Group (UCG).
2. Use ICS concepts and principles consistent with NIMS.
3. Set conditions for synchronized application of ESF capabilities to demonstrate a timely, unified response.

The Senior Leaders Steering Committee was developed during the NMSZ planning process to guide individuals from the State and Region in developing consistency within that process. The Committee is comprised of senior SEMA, FEMA, MONG, and U.S. Department of Defense (DOD) officials. To facilitate the Senior Leaders' intent, senior leadership (Regional Administrator and Governor) will rapidly establish a UCG that applies ICS concepts and principles consistent with NIMS. The UCG will include the Federal Coordinating Officer (FCO) and Principal State Official, also referenced as State Coordinating Officer (SCO), and will achieve the support/assistance priorities established by the SEOP and RAHP. Refer to the Figure BP-6 below for details.

Figure BP-6 Unified Coordination Group



3.2 Concept of Operations

3.2.1 General

The concept of operations described in this section is applicable from the period immediately after the earthquake occurs to 120+ hours after the earthquake (E to 120+ hours). All operations contained within this OPLAN are associated with one of the following response phases:

- Phase 2a: Immediate Response: E to E+24 hours

- Phase 2b: Deployment: E+24 hours to E+72 hours
- Phase 2c: Employment/Sustained Response: E+72 hours to E+120 hours and beyond

Due to the anticipated communication blackout, this OPLAN establishes the initial operational objectives until a comprehensive COP can be obtained and an IAP is developed and released. Thus the OPLAN has been divided into objectives for each response phase: Alert/Notification (2a), Deployment/Employment (2b), and Sustained Response (2c). Subsequent activities associated with stabilization and reconstruction will be detailed in other plans. While not part of this OPLAN, recovery activities will begin shortly after the earthquake, and the transition from response to recovery will be gradual and not defined by specific timeframes. The OPLAN also does not include preparedness activities that take place prior to the earthquake.

For purposes of this document, integrated working groups developed COAs, a sequence of activities an entity may take to accomplish a mission to achieve the 16 operational objectives. While multiple COAs may be available to accomplish each objective, this OPLAN was developed according to the COA deemed most appropriate for each objective. Given incident-specific circumstances and the necessity for coordination among local governments and State and Federal Governments to identify required resources, multiple COAs likely will be implemented concurrently during an actual incident.

For additional details regarding the selected COAs, refer to the tabs in Annex C. Additionally, a Synch Matrix is provided in Annex X: Execution Checklist. Each table includes a response timeline that outlines COAs within the context of the overall response of local, state, federal, and (where applicable) private sector entities.

3.2.2 Immediate Response

Immediate response begins with alert and activation. The alert of the joint state/federal organization is summarized in this section. In all cases, the seismological community needs time to compile seismic readings and calculations in order to provide accurate data.

3.2.2.1 Earthquake Notification System

Maintained by the USGS, Earthquake Notification Service (ENS) is a customizable system provided to alert subscribers of all earthquakes identified by the National Earthquake Information Center (NEIC) in Golden, Colorado. Missouri SEMA will access this USGS website's links for earthquakes occurring within the NMSZ. ENS reports are generated as soon as possible following an earthquake. Access to ENS is via: <https://sslearnquake.usgs.gov/ens/help.html?page=help>. SEMA Duty Officers and other key staff have subscribed to the ENS. In addition, notifications may be received by the Missouri Information Analysis Center (MIAC).

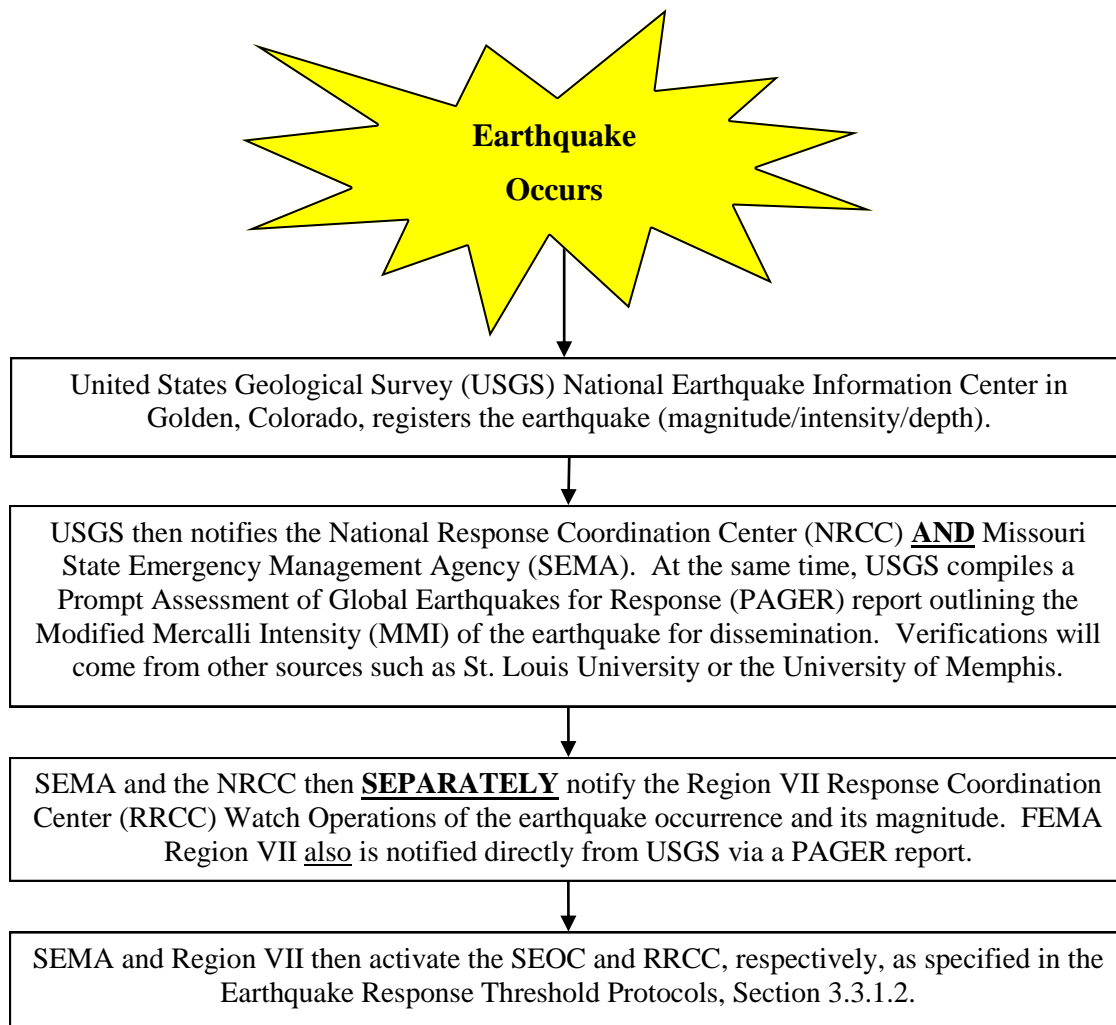
3.2.2.2 Prompt Assessment of Global Earthquakes for Response

Maintained by the USGS, the Prompt Assessment of Global Earthquakes for Response (PAGER) system provides estimates of the number of people and the names of cities exposed to severe shaking following significant earthquakes worldwide. In order to quickly gain situational awareness, Region VII will access the USGS website's links to PAGER results for earthquakes occurring within the NMSZ. Managed by the NEIC in Golden, Colorado, PAGER reports are generated using MMI measurements and disseminated almost immediately after an earthquake. Access to PAGER data is via: <http://earthquake.usgs.gov/earthquakes/pager/>. Region VII Watch Desk and DOD staff have subscribed to the PAGER System. The flow chart on Figure BP-7, details how the SIOC and Region VII RRCC will likely receive notification of an earthquake in the NMSZ:

The NRCC will use the U.S. Earthquake Automatic Activation and Response Checklist, dated January 2009, which pre-determines national resource allocations based on MMI. In addition to the NEIC,

Missouri may use St. Louis University, University of Memphis, or the Central United States Earthquake Consortium (CUSEC) to confirm seismic events within the State of Missouri.

Figure BP-7 Earthquake Response Notification Process



3.2.2.3 NMSZ Seismic Event Response Thresholds

Within the State of Missouri, the following pre-designated seismic activity levels (Moment Magnitude) have been identified to serve as the activation threshold for particular state and subsequent federal actions:

1. At a **M_w 4.5 or greater earthquake**, the USGS NEIC at Golden, Colorado, will notify SEMA of the seismic event. SEMA will go to a Classification I emergency status (No SEOC Activation). Verifications will come from other sources such as St. Louis University or the University of Memphis. The RRCC Watch will monitor the situation.
2. At a **M_w 5.0**, the Missouri Department of Transportation (MoDOT) will conduct land-based damage assessment of bridges and roadways in the impacted area. SEMA will go to a Classification II or III emergency status based on intelligence. The RRCC will activate to mirror the State's activation level.

3. At a **M_w 6.5 or greater**, all state and federal departments/agencies identified in the Missouri SEOP and RHAP, respectively, will activate their plans and take respective actions for an earthquake response (e.g., aerial assessment of bridges and roads). Damage assessment activities will be coordinated by SEMA as specified in the SEOP, Annex D, Damage Assessment and Incident Analysis.

Based on state and federal activation threshold methodologies, both SEMA and FEMA Region VII will need to acknowledge both M_w and MMI. Currently, the State of Missouri uses an activation system based on M_w only. Consequently, Region VII must be prepared to respond/activate to such levels in support of any state activation. At the same time, FEMA Region VII will receive MMI levels from the NRCC, as well as the USGS PAGER Reports. As specified in the U.S. Earthquake Automatic Activation and Response Checklist, MMI will be used as guidance for decisions regarding deployment of federal resources/assets. The RRCC will analyze all information received, but will remain committed to support the State of Missouri as requested, and may activate in response to M_w only. Operations activation thresholds are summarized on Table BP-2.

3.2.2.4 Local, State, and Federal Operations Centers

The earthquake will trigger immediate activation of local and state command and coordinating facilities including:

- The Missouri SEOC, located at SEMA Headquarters at 3202 Militia Drive, Jefferson City, Missouri
- Regional SACCs in Missouri Areas C and E
- Local EOCs in counties affected by the earthquake and in counties in unaffected regions of the State from which resources will be deployed; EOCs of other local and regional organizations
- Department Operations Centers (DOC) of all state agencies, departments, and offices with response roles under the SEOP.

The earthquake also will induce immediate activation, or elevated level of activation, of all DHS command and coordinating facilities including:

- DHS National Operations Center (NOC)
- FEMA NRCC
- FEMA RRCCs Region IV, V, VI, and VII
- FEMA RRCCs in unaffected regions
- The regional and national operating centers of:
 - Other DHS components including those of the U.S. Coast Guard (USCG), Transportation Security Administration (TSA), and U.S. Customs and Border Protection (CBP)
 - Other federal agencies including entities with coordinating, primary, and support roles within ESFs defined under the NRF
 - DoD, including U.S. Northern Command, Joint Director of Military Support, and the National Guard Bureau.

Table BP-2 Operations Activation Thresholds

State Activation	Federal Activation	Missouri State Emergency Operations Center (SEOC) Activation Level*	Regional Resource Coordination Center (RRCC) Activation Level*	RRCC Staffing Requirements	Possible Region VII Actions/Activities
Magnitude 1.0 – 4.4 (Any depth)	Mercalli I – III	Steady-state	LEVEL 4 (Steady-state)	Standard Watch Operations and Disaster Operations Staff	Normal Reporting/Monitoring
Magnitude 4.5 – 4.9 (Any depth)	Mercalli IV	CLASS I EMERGENCY Control Room Activation Only/ Duty Officer Analysis	LEVEL 3 Minor Event/ Incident Minimal Monitoring	Watch Operations Staff, RRCC Branch Chief, Disaster Operations Division Director, Operations Section Chief Operational Planning staff; as needed, response may also require Geographic Information System (GIS), Mission Assignments Manager, Finance & Administration, selected Emergency Support Functions (ESF), Incident Management Assistance Team, State Liaison Officer (SLO), Individual Assistance, Public Assistance	Increased Situational Awareness, Incident Reports, Damage Assessments, Deployment of SLO and/or Declaration Preparation
Magnitude 5.0 – 6.4 (Any depth)	Mercalli V - VI	CLASS II/III EMERGENCY Duty Officer Analysis, Possible SEOC Activation	LEVEL 2 Moderate Event/Incident Mid-Level Activation	RRCC Level 3 staffing plus any additional ESFs, and Defense Coordinating Officer (DCO)	RRCC Level 3 actions/activities
Magnitude 6.5 + (Any depth)	Mercalli VII – X+	Class III EMERGENCY Full SEOC Activation	LEVEL 1 Massive Event/Incident Full Activation	ALL applicable staff and ESFs, DCO	Full Activation activities – Reporting, Situational Awareness, Staff Deployment, Declaration Preparation, movement of commodity teams and resources to staging

() the SEOC and Region VII RRCC should also increase their Activation Levels in response to damage reports received.*

3.2.2.5 Common Operating Picture

The UCG will require defined Essential Elements of Information (EEI) to provide the basis to gather and analyze available information needed to develop an IAP. The absence of normal information conduits will inhibit the joint Planning Section's ability to establish a COP. A list of EEI critical to earthquake response is included in Annex B.

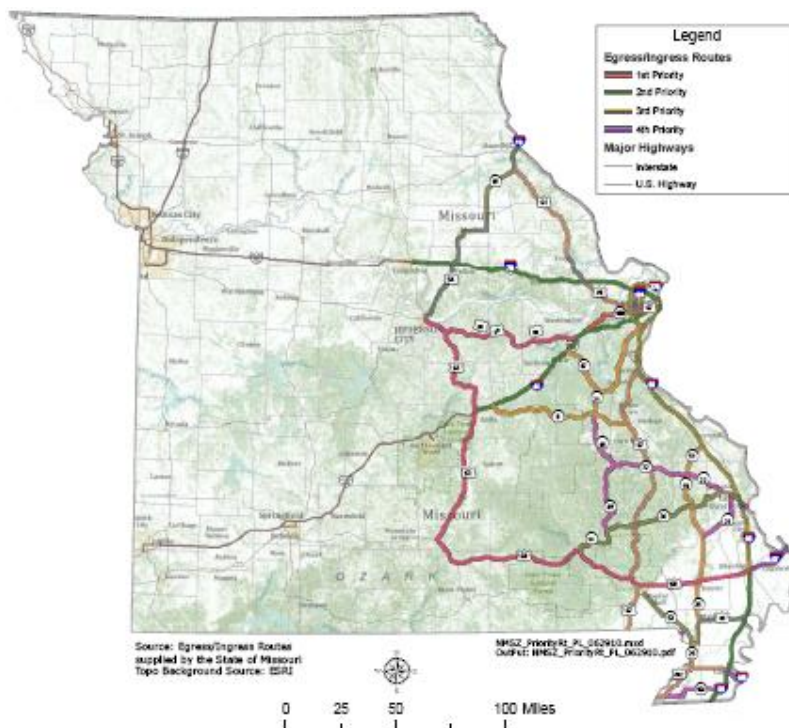
Once activated, the RRCCs are expected to coordinate with the NRCC in an effort to supply time-sensitive situational analysis/awareness, intelligence, and other information. The NRCC will filter information from multiple RRCCs. The NRCC will evaluate and take appropriate actions to provide the necessary oversight, situational awareness, decision support, and federal interagency forums to help senior decision makers execute Homeland Security Presidential Directive (HSPD-5) functions. The regional JFOs provide information and situational awareness to the RRCC. JFO information is provided by the federal responders (Incident Management Assistance Team [IMAT], S&R teams, Mobile Emergency Response Support [MERS], etc.), as well as state and local emergency managers.

3.2.3 Deployment

The overarching strategy to complete the mission is to execute an integrated approach in which response capabilities are increased as access is gained along multiple axes of movement into the most severely impacted areas. The earthquake scenario will impede movement along traditional transportation corridors due to roadway damage, bridge collapse, and debris in the right of way. The State will be subdivided into three tiers: Support, Response, and Affected. As access is gained, resources will be moved into affected communities to support lifesaving activities including local efforts for firefighting, public safety, sheltering, commodity distribution, and medical treatment. The UCG will lead a joint state/federal operation that will provide support for field-level incident response through integration of state and federal resources. A coordinated response will be achieved by mobilizing state-level resources through the State Fire Marshal Mutual Aid System unless mobilized by law enforcement or military authority. All initial response elements must report to assigned staging areas upon mobilization and then will subsequently deploy to the affected areas. The intent is for resources in the support tier to remain in place unless otherwise directed by this OPLAN to support replenishment of initial responding resources.

Plans have been developed to expedite movement of emergency response elements, mobile command posts, and communications vehicles into designated staging areas. Effective staging, movement, and support of resources are critical to success of this OPLAN. The axes of movement, shown on Figure BP-8, include use of available land routes and air transport. Priority routes are subject to change based on initial assessment following an earthquake event. Major components are discussed in subsequent paragraphs.

Figure BP-8 Ground-based Axes of Movement



3.2.3.1 Unified Coordination Group (UCG)

Joint state/federal operations will be conducted under the leadership of a UCG in accordance with Unified Command (UC) principles. Initially, the Missouri Director of Public Safety will be the Principal State Official (PSO), the Governors Authorized Representative (GAR), and the party responsible for state-level UC coordination with all departments, commissions, and agencies on the Governor's behalf. The PSO will also serve as the State Coordinating Officer (SCO) while joint operations are conducted from the SEOC. The members of the UCG are listed in RAHP. The UCG will be established immediately at the SEOC through available communications systems and within 24 hours of a catastrophic earthquake.

Once federal integration occurs, the UCG will facilitate effective utilization and integration of state and federal resources through unity of effort and will set priorities and objectives through use of a joint IAP. Upon UCG transfer to the JFO when FEMA and SEMA establish that facility, the PSO will identify a SEMA representative to serve as the SCO and mobilize to the JFO while the PSO retains management of the SEOC. The JFO-based UCG will include the PFO, FCO, Defense Coordinating Officer (DCO), and SCO.

3.2.3.2 State Emergency Operations Center

Missouri's state-level emergency operations will be conducted from the SEOC under the UC of the PSO with SEMA's assistance. Other representatives from state agencies, departments, and offices having emergency response and recovery roles outlined in the SEOP complete Missouri's emergency management operations. The organization for a catastrophic event such as an earthquake will be based on the SEOP Basic Plan, Section IV. The SEOC will operate according to the Missouri SEOC Concept of Operation Standard Operating Guide (SOG).

3.2.3.3 State Area Coordination Center, Initial Operating Facility, Joint Field Office, and Branch Offices

Although joint state/federal operations will be initiated at the SEOC and RRCC, FEMA and SEMA will establish an Initial Operation Facility (IOF)/JFO as far forward as is practical within 5 days of the earthquake. Most likely, the JFO will be established in the Columbia or Jefferson City, Missouri, area given the likely condition of local infrastructure and availability of office and warehouse space. SEMA and FEMA may establish SACCs/Branch Offices, respectively, depending on the availability of suitably undamaged space, to provide forward support for state/federal coordination. FEMA and SEMA will establish SACCs/Branch Offices within each branch of the organization as quickly as potentially available facilities can be accessed and safety inspections conducted.

3.2.3.4 Incident Management Assistance Team

FEMA Region VII will deploy a State Liaison Officer (SLO) to the Missouri SEOC in accordance with the response thresholds. Within 24 hours, FEMA Region VII will deploy a Regional (Type II) IMAT to support the incident. The IMAT will support tactical operations.

A FEMA Region VII Type III IMAT will deploy to the SEOC to initiate coordination of federal support at the IOF. Once the JFO is open, the IMAT staff will meld into the JFO operations structure under the direction of the FCO.

If a National IMAT (Type I) is deployed to Region VII, the team will be part of a defined mission most likely within the St. Louis metropolitan area.

3.2.3.5 Missouri Incident Support Teams

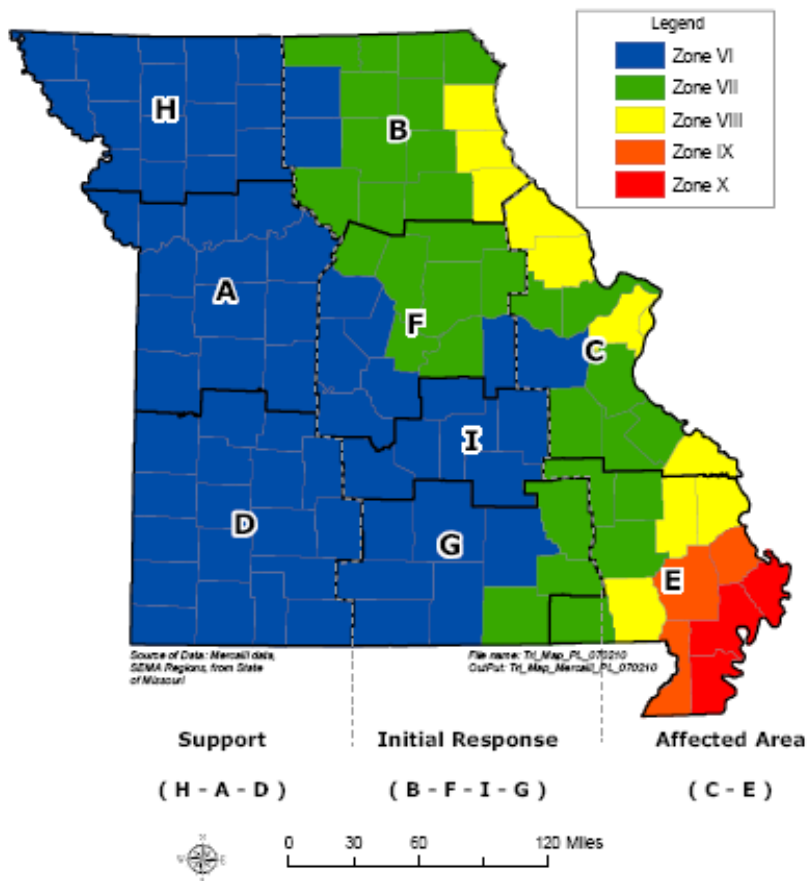
State and local Incident Support Teams (IST) called up by the State Fire Marshall's Office will initially support local level mutual aid assets. The ISTs will provide Incident Command expertise and in some cases, the primary, deputy, or alternate Command/Staff position in the organization.

3.2.3.6 Response Organization

The response strategy will be implemented using a combined geographic and functional organization allowing for decision making at the lowest level possible, and to facilitate integration of resources at the field level. The affected area will be subdivided into divisions and branches. The actual organization will be determined by the Operation Section Chief in conjunction with the UCG based on the specifics of the incident.

Missouri is divided into nine emergency management areas A through I. Missouri will establish SACCs to organize resources and response geographically. Missouri's response tiers, shown on Figure BP-9, include initial estimates of where state and local resources will be available.

Figure BP-9 Response Tiers



3.2.3.7 Joint State and Federal Logistics

The joint state and federal logistics support system includes a combination of distribution centers, incident support bases, and operational staging areas to receive and distribute response resources, as described in Annex D. Although it is understood that the NRF CIS will be implemented immediately and provide an initial push of federal resources to an Incident Support Base (ISB) or staging area, this OPLAN includes provision of additional scenario-specific resources anticipated for an incident of this magnitude. SEMA has worked with local Emergency Management Directors (EMD) to identify several potential sites for Base Camps, Logistics Staging Areas (LSA), and State Points of Distribution (SPOD) for generators, equipment, and petroleum refueling (see Annex D).

SEMA will establish State Staging Areas for emergency services resources to include firefighting, EMS, law enforcement, and search and rescue resources in the vicinity of the area affected. Staging areas are listed in Annex D, Section 5.4.

- **Base Camps** – Damage to transportation infrastructure, utilities, housing, lodging, and retail services will greatly reduce capabilities for support of response teams, assessment teams, repair crews, shelter workers, and others deployed to the most severely affected areas. This will necessitate establishment of base camps to provide logistical support for these teams. Annex D, Section 5.4 lists potential sites for base camps in the affected areas. Actual locations of these facilities will be determined by need and in coordination with local officials.

- **Airfields** – FEMA and SEMA will work with civil and military airfield managers, MoDOT, and local officials to identify airfields suitable for receipt of critical personnel, equipment, resources, and supplies following the earthquake. Airfield suitability will be based on pre-earthquake airfield data, as well as a post-earthquake runway and infrastructure assessment of the airfield and ground routes leading to the airfield. The NMSZ Air Operations Plan, which identifies potential airfields and includes additional air operations information, is within Annex E.
- **Points of Distribution (POD)** – SEMA will work with local officials to identify sites for PODs for distribution of critical supplies such as water and food to the affected population. Local government officials will determine actual locations of PODs.

3.2.4 Axes of Movement

The joint state/federal operation will emphasize reestablishment of the transportation system to facilitate movement of resources into the most severely affected areas from state and federal staging areas and from other sources, and to move injured people, evacuees, and others out of the affected areas. Lines of supply and transportation will include:

- Priority land routes, as shown on Figure BP-8, depending on damage and/or closure of key bridges and freeways.
- Air routes, using rotary wing and fixed wing aircraft, between established helispots, helibases, heliports, regional airports, and temporary sites for landings.

3.2.5 Employment

The core of the response operation and logistics is a hub and spoke strategy supporting population centers and areas of resource needs. Staging sites will support hubs with the human resources, equipment, and commodities. The Execution Schedule (Annex X) lists specific state and federal resources required to carry out COAs, and the proposed timeframes for the actions.

3.2.6 Demobilization

Demobilization of all resources will be managed under a separate plan. Demobilization is not expected during the operational timeframe this OPLAN addresses.

3.3 Key Roles and Responsibilities

3.3.1 State Roles and Responsibilities

Identification of the State's roles and responsibilities is essential to ensure an orderly, efficient, and effective response, and to provide appropriate and adequate accountability for those roles, responsibilities, and associated operational tasks. This section focuses on those strategic and operational roles and responsibilities to ensure operational mission success. Additional information including COAs, internal ESF organization, and roles and responsibilities is in Annex C, Appendix 1 through 16.

3.3.1.1 Missouri State Emergency Management Agency

SEMA, on behalf the Missouri Department of Public Safety (DPS), will direct, oversee, and execute response support. As the lead for all State of Missouri response and recovery operations, SEMA coordinates local requests for support from the Federal Government through FEMA. SEMA is the lead state agency for ESF-3, -5, -7, -14, and -15. ESF-3 is responsible for debris and wreckage clearance coordination, structural inspection of facilities, demolition of unsafe structures, temporary repair of essential facilities, and administration of the Structural Assessment and Visual Evaluation Coalition (SAVE). ESF-5 coordinates the incident management and response efforts including issuance of mission taskings, resource and human capital, incident action planning, and financial management. ESF-5 is

responsible for overall response operations. ESF-7 is responsible for providing resource support (e.g., facility space, office equipment and supplies, and contracting services). ESF-14 is responsible for long-term recovery activities. ESF-15 is responsible for emergency public information and protective action guidance, media and community relations, and congressional and international affairs. SEMA also manages state ESF-17 to coordinate animal shelter and confinement operations, manage the volunteer labor force providing animal protection, coordinate animal health services for sheltered/confined animals, and coordinate long-term maintenance, placement, and/or adoption of animals.

3.3.1.2 Missouri Department of Agriculture

MDA is the lead state agency for ESF-11, responsible for providing nutrition assistance, coordinating animal and plant disease and pest response, and ensuring raw food safety and security.

3.3.1.3 Missouri Department of Economic Development

Missouri Department of Economic Development (MDED) is the lead state agency for ESF-12, responsible for energy infrastructure assessment, repair and restoration, energy industry coordination, energy forecast, and maintenance of sufficient power and fuel supplies for response activities.

3.3.1.4 Missouri Department of Health and Senior Services

Missouri Department of Health and Senior Services (MDHSS) is the lead state agency for ESF-8. DHSS is responsible for providing public health and disaster health services including management and distribution of the Strategic National Stockpile (SNS), coordination of mental and behavioral health services, coordination of environmental health services, management of deceased and mortuary services, coordination of the welfare of elderly and special needs populations, and oversight of licensed medical facilities.

3.3.1.5 Missouri Department of Natural Resources

Missouri Department of Natural Resources (MDNR) is the lead state agency for ESF-10, responsible for managing oil and hazardous materials response (e.g., chemical, biological, and radiological), and coordinating environmental short- and long-term cleanup. The Division of Geology and Land Survey will send a response team to the affected area to obtain data and advise emergency management, as well as provide a technical expert to the SEOC.

3.3.1.6 Missouri Department of Social Services

Missouri Department of Social Services (MDSS) is the lead state agency for ESF-6 with responsibility to manage mass care activities associated with emergency assistance, disaster housing, victim-related recovery efforts, and non-medical human services

3.3.1.7 Missouri Department of Transportation

MoDOT is the lead state agency for ESF-1 and responsible for restoration/recovery of transportation infrastructure, movement restrictions, and transportation system damage and impact assessment.

3.3.1.8 Missouri Division of Fire Safety

Missouri Division of Fire Safety (MDFS) is the lead agency for ESF-4 and -9, responsible for fire suppression, lifesaving assistance, and S&R operations.

3.3.1.9 Missouri National Guard

MONG is the lead state agency for ESF-16. MONG has responsibility to provide the State's military-controlled human and material resources. MONG resources will generally be used to directly support

other ESFs and occasionally to coordinate specialized missions, if appropriate. In addition, MONG will coordinate directly with the Air Operations Branch to provide aviation/airspace management and control.

3.3.1.10 Missouri State Highway Patrol

Missouri State Highway Patrol (MSHP) is the lead state agency for ESF-2 and -13. ESF-2 has responsibility to identify communication assets utilized in response efforts, coordinate deployment of communication assets to establish temporary communications, and support communications interoperability. ESF-13 is responsible to maintain law and order, provide traffic and crowd control, and conduct state law enforcement and security-based operations of critical infrastructure and key resources (CI/KR).

3.3.2 Federal Roles and Responsibilities

Identification of the Federal Government's roles and responsibilities is essential to ensure an orderly, efficient, and effective response, and to provide appropriate and adequate accountability for those roles, responsibilities, and associated operational tasks. This section focuses on those strategic and operational roles and responsibilities to ensure operational mission success. Additional information including COAs, internal ESF organization, and roles and responsibilities is in Annex C, Appendix 1 through 16.

3.3.2.1 Federal Emergency Management Agency

FEMA is the lead federal agency for ESF-5, -6, -9, -14, and -15. ESF-5 coordinates the incident management and response efforts including issuance of mission assignments, resource and human capital, incident action planning, comprehensive national incident logistics planning/management and sustainment capability, and financial management.

- ESF-5 is responsible for overall response operations.
- ESF-6 manages mass care activities associated with emergency assistance, disaster housing, and human services.
- ESF-9 is responsible for lifesaving assistance and S&R operations.
- ESF-14 is responsible for long-term recovery activities.
- ESF-15 is responsible for emergency public information and protective action guidance, media and community relations, and congressional and international affairs.

3.3.2.2 U.S Coast Guard

U.S Coast Guard (USCG) is a support agency that has responsibilities associated with oil and hazardous materials response (e.g., chemical, biological, and radiological), and S&R operations.

3.3.2.3 U.S. Department of Defense

DoD provides Defense Support of Civil Authorities (DSCA) in response to requests for assistance during domestic incidents. Except for support provided under Immediate Response, the obligation of DoD resources to support requests for assistance in the Northern Command's Area of Responsibility (AOR) is subject to approval of the U.S. Northern Command (USNORTHCOM) Commander if the capabilities to support the request are available in USNORTHCOM.

3.3.2.4 U.S. Army Corps of Engineers

USACE is the lead federal agency for ESF-3. USACE is responsible for infrastructure protection and emergency repair, debris clearance, infrastructure and critical public services restoration, engineering

services and construction management, and emergency contracting support to lifesaving and life sustaining operations.

3.3.2.5 U.S. Department of Transportation

USDOT is the lead federal agency for ESF-1 and responsible for transportation safety, restoration/recovery of transportation infrastructure, movement restrictions, and transportation system damage and impact assessment. All requests for transportation will be coordinated through the Operations Section.

3.3.2.6 Federal Aviation Administration

The Federal Aviation Administration (FAA) is a support agency that coordinates directly with the Air Operations Branch to provide aviation/airspace management and control.

3.3.2.7 U.S. Department of Health and Human Services

U.S. Department of Health and Human Services (HHS) is the lead federal agency for ESF-8 and responsible for activities associated with public health, medical and mental health services, and mass fatality management.

3.3.2.8 National Weather Service

The National Weather Service (NWS) is a support agency that provides ongoing weather Subject Matter Expert (SME) support.

3.3.2.9 U.S. Department of Agriculture

U.S. Department of Agriculture (USDA) is the lead federal agency for ESF-4 and -11, and is responsible for nutrition assistance, animal and plant disease and pest response, food safety and security, natural and cultural resources and historical properties protection and restoration, safety and well-being of household pets, and support to wildland, rural, and urban firefighting operations

3.3.2.10 U.S. Department of Energy

U.S. Department of Energy (DOE) is the lead federal agency for ESF-12, which is responsible for energy infrastructure assessment, repair and restoration, energy industry coordination, and energy forecast.

3.3.2.11 U.S. Department of Homeland Security

U.S. Department of Homeland Security (DHS) is the lead agency for ESF-2, which is responsible to implement communications for the National Communications System. DHS is also the lead agency for protection of CI/KR. DHS will designate an Infrastructure Liaison to respond and support the RRCC and/or JFO.

3.3.2.12 U.S. Department of Justice

U.S. Department of Justice (DOJ) is the lead agency for ESF-13, responsible for conducting federal law enforcement and security-based operations regarding CI/KR.

3.3.2.13 U.S. Environmental Protection Agency

U.S. Environmental Protection Agency (EPA) is the lead agency for ESF-10 responsible for oil and hazardous materials (e.g., chemical, biological, and radiological) response, and environmental short- and long-term cleanup.

3.3.2.14 General Services Administration

General Services Administration (GSA) is the lead agency for ESF-7, responsible for providing resource support (e.g., facility space, office equipment and supplies, and contracting services).

3.4 Local Coordination Requirements

According to NIMS, disasters should be handled at the lowest possible level; therefore, it is vital that the local government participate in control and coordination to the extent possible following this incident. Local coordination will be accomplished through the local EOCs, which will establish and maintain contact with responders in the area and with the SACC if established or the SEOC for Missouri.

3.5 NGO Coordination Requirements

Specification of select NGOs' roles and responsibilities is essential to ensure an orderly, efficient, and effective response, and to provide appropriate and adequate accountability of those roles, responsibilities, and associated operational tasks. This section identifies a key NGO, the American Red Cross (ARC). Other NGOs will operate under the guidance of the ESFs they directly support. Additional information including COAs, internal ESF organization, and roles and responsibilities is in Annex C, Appendix 1 through 16.

3.5.1 American Red Cross

The American Red Cross (ARC) is a key NGO that provides SME on regulations, policy, and all relevant ARC issues including general mass care planning, preparedness, response, and recovery activities. Additional information including COAs, the ARC's support to ESF-6, and its roles and responsibilities is in Annex C.

3.5.2 Missouri Voluntary Organizations Active in Disaster

Missouri Voluntary Organizations Active in Disaster (MOVOAD), in conjunction with SEMA's State Voluntary Coordinator, is the lead coordinating body for members providing disaster services. The State Voluntary Coordinator coordinates with the FEMA Voluntary Agency Liaisons associated with the National Voluntary Organizations Active in Disaster (VOAD) to help integrate provision of services within the State of Missouri.

3.5.3 National Voluntary Organizations Active in Disaster

The National VOAD is the lead agency for nonprofit organizations and volunteers that work in all phases of disaster, serving as the primary organization in the NRCC. The National VOAD will work with these organizations responding to the disaster to foster communication, coordination, collaboration, and cooperation. The National VOAD integrates provision of services to reduce duplication of efforts and match capabilities with disaster needs.

3.6 Private Sector Coordination Requirements

SEMA and FEMA will coordinate with the private sector to support critical private sector preparedness for activities to be implemented. During incident management, appropriate private-sector entities may be notified and requested to provide relevant SME.

3.7 Key Decisions

3.7.1 Key State Decisions

Key state decisions required during a catastrophic earthquake include:

- Scope of the incident and the population affected
- Level of SEOC activation
- Appropriate state staff and programs/resources required to meet the needs within the impacted area
- Establishment of pre-determined command/control architecture
- Incident period and incident type
- Need for a Preliminary Damage Assessment (PDA)
- Declaration of Emergency and request for federal assistance.

3.7.2 Key Federal Decisions

Key federal decisions required during a catastrophic earthquake include:

- Scope of the incident and the population affected
- Level of RRCC activation
- Appropriate state and federal staff and programs/resources required to meet the needs within the impacted area
- Establishment of pre-determined command/control architecture
- Pre-positioning of any commodities and/or personnel
- Deployments of any Type III and/or Type II IMAT and/or recommendations for deployments of Type I IMAT
- Need for a PDA
- Recommendation for Presidential Declaration
- Need to establish a JFO and its level of staffing
- Execution of mission assignments to activate an agency liaison and/or to perform an operational task related to responding/recovering from the incident
- Transfer of operations/coordination between JFO and RRCC.

3.8 Critical Information Requirements

The UCG responsible to implement this OPLAN will require critical information such as:

- Incident response actions proposed or taken by federal, state, and local governments within and outside of Missouri/Region VII (e.g., State of Emergency, public health emergencies, etc.)
- Status of declarations (local, state, public health, other federal, etc.)
- Population effects including displaced individuals, self-evacuated, injured, without commodities, and fatalities
- Potential chemical, physical, and natural hazards that may affect the safety and health of response and recovery workers
- Identification of national-level and/or Governor's priorities
- Damage to CI/KR

- Ability of government organizations to continue essential functions and services
- Requests and/or need for state and/or federal assistance
- Locations, capabilities, and number of all deployed response resources including equipment, commodities, and personnel
- Factors that have a significant economic impact.

4. ADMINISTRATION, RESOURCES AND FUNDING

4.1 Administration

Information related to all sections of Administration, Resources, and Funding including senior financial advisor responsibilities, financial oversight, personnel administrative management responsibilities, authorities for and policy on personnel augmentation, personnel training, travel, and travel reimbursement reside with representatives' home agencies. State personnel requirements are ultimately managed by SEMA. Federal personnel requirements are listed under their corresponding sections of the Region VII RAHP.

4.1.1 Responsibility for Management Oversight

Information related to the Responsibility of Management Oversight for state and federal personnel is within the corresponding section of the Missouri SEOP and Region VII RAHP, respectively.

4.1.2 Senior Financial Advisor Responsibilities

Information related to the Senior Financial Advisor Responsibilities is within the corresponding sections of the Region VII RAHP.

4.1.3 Coordination of State Mutual Agreements

Information related to coordination of state mutual agreements is within the SEOP, Annex H.

4.1.4 Financial Oversight

Information related to federal-level financial oversight is within the corresponding section of the Region VII RAHP and NRF, Financial Management Support Annex. Information related to state-level financial oversight is within the Missouri SEOP, Base Plan.

4.1.5 Personnel Management

Emergency management and incident response activities require carefully managed resources (e.g., personnel, teams, facilities, equipment, and/or supplies) to meet incident needs. Information related to federal-level Personnel Administrative Management Responsibilities is within the corresponding section of the Region VII RAHP. Information related to state-level Personnel Administrative Management Responsibilities is based on each agency's policies. Jointly, organizations will use standardized resource management concepts such as typing, inventorying, organizing, and tracking to facilitate dispatch, deployment, and recovery of resources before, during, and after an incident.

Resource management will remain flexible and scalable in order to support any phase of the incident and be adaptable to changes as necessary. Region VII and the State of Missouri adhere to the management concepts and principals through all phases of emergency management and incident response. This ensures an efficient and effective deployment of resources.

4.1.6 Personnel Augmentation

While the incident is catastrophic and skilled personnel will be at a premium, it is understood individual state and federal agencies have their own personnel augmentation policies.

4.1.7 Personnel Training

Individual state and federal agencies are responsible for training employees to perform commensurate to their roles, responsibilities, and ability to perform in accordance with standard resource typing guidelines and operational requirements. This includes federal individuals reporting to the JFO who must be fully trained in appropriate incident management doctrine and procedures. Federal representatives may be required to participate in training activities upon arrival at the JFO.

4.1.8 Travel

Individual state and federal agencies will reimburse employees according their own travel policies. Federal agencies are responsible for reimbursing for travel to and from the field activities.

4.2 Logistics Management and Resource

SEMA and local emergency management agencies coordinate resource and logistics management as set forth in the SEOP and LEOPs. Under the NMSZ scenario, automatic activation and response procedures have been developed to expedite resource and logistics support. All resource and logistics support during Phase 2 will prioritize lifesaving and life sustaining operations.

Region VII will use the Logistics Management Operations Manual, 9380.1 to conduct NMSZ response operations. Following a catastrophic earthquake, FEMA Region VII will immediately coordinate movement of federal resources towards the affected area, in anticipation of State of Missouri requests for assistance. Resources are identified in the NRF CIS and the Region VII Execution Schedule. The CIS outlines federal commodities, teams, and other resources designated for immediate mobilization in anticipation of, or in response to, a catastrophic incident such as an earthquake. As described in the CIS, all federal departments and agencies, as well as the ARC, are tasked to initiate specific actions within the identified timeframe. Additionally, entities assigned primary or supporting responsibilities within ESFs will immediately implement those responsibilities, as appropriate or directed.

The Execution Schedule lists incident-specific resources and provides general timeframes for deployment. These resources, including the identified quantities, are based on an assessment of the requirements to carry out the COAs for an earthquake response. The Execution Schedule was developed according to incident-specific requirements and reflects specific resources and quantities not accounted for in the CIS. Therefore, the NRCC is expected to use the schedule in conjunction with the CIS to ensure deployment of appropriate quantities of resources. Requirements for resource quantities will be refined based on actual needs identified by Missouri as response operations proceed.

Upon notification a NMSZ earthquake has occurred, FEMA Headquarters will immediately activate the nationwide logistics system to mobilize commodities required for the response. As described above, FEMA Region VII will initially push resources identified in the CIS and Execution Schedule towards the affected area in anticipation of state requests for assistance. Resources will be deployed to federal installations in the vicinity of the affected area until such time as SEMA begins to request those resources.

4.2.1 Coordination of Logistics

As set forth in NIMS, the NRF, and ESF-7 Logistics Management and Resource Support Annex, agencies of local governments and the State and Federal Governments will move rapidly to provide lifesaving and sustaining resources to the State of Missouri, and to restore critical services via the National Logistics

System. If required, and where practical, resources will be staged in Missouri. As soon as feasible, SEMA and FEMA will form a UCG.

The response and recovery structure will be organized, staffed, and managed in a manner consistent with NIMS principles and will be led by the UCG. A JFO will be established at an agreed-upon location as the facility where the UCG, the U.S. Command Staff, and General Staff operate.

Lead agencies and their logistics-related responsibilities are shown below:

4.2.1.1 Local

Local Emergency Management Agencies:

- Coordinate resource and logistics operations at the local level
- Coordinate with SEMA regarding resource and logistics requirements
- Support POD operations within their jurisdictions.

4.2.1.2 State

Missouri State Emergency Management Agency:

- Assumes responsibility for coordinating the Logistics and Resource Management and Disaster Terrain Management functions within the SEOC Logistics Section
- Coordinates allocation of resources with other Missouri agencies, departments, and offices through the SEOC Logistics Section and SEOC Logistics Team
- SEOC Logistics/Resources Team Chief coordinates with the Operations Section to ensure Logistics/Resources operations are conducted according to the intent and direction of the Operations Section Chief.
- SEOC Logistics Team Chief supervises and coordinates the activities of the Logistics Section Chief and the Resources Section Chief.

4.2.1.3 Federal

Federal Emergency Management Agency:

- Coordinates material management, determining requirements, sourcing, ordering and replenishment, storage, and issuance of supplies and equipment (including network, computer, and communications equipment required to support JFO and other field operations)
- Coordinates transportation management of equipment and procedures for moving material from storage facilities and vendors to incident victims, with particular emphasis on the surge and sustainment portions of response
- Coordinates transportation management, responding to requests from other federal organizations
- Coordinates facilities management including location, selection, and acquisition of storage and distribution facilities (Distribution Center [DC], Mobilization (MOB) Centers, and National Logistics Staging Area (NLSA)).

- Coordinates the logistics for establishing and operating facilities, as well as managing related services to shelter and support incident responders in JFOs and other field-related operations, including base camps
- Coordinates personal property management of policy and procedures guidance for maintaining accountability of material and identification and reutilization of property acquired to support a federal response operation
- Coordinates management of Electronic Data Interchange to provide end-to-end visibility of response resources.
- Coordinates planning with internal and external customers and other supply chain partners in the federal and private sectors.
- Conducts a comprehensive review of best practices and available solutions for improving the delivery of goods and services to the customer.

General Service Administration:

- Coordinates locating, procuring, and issuing resources to other federal agencies (OFA) for use in emergency operations necessary to support the federal emergency response or to promote public safety
- Coordinates transfer of excess federal personal property and assists in its disposal when requested
- Coordinates efforts to locate and use available space for incident management activities
- Coordinates and determines availability and provision of consumable non-edible supplies stocked in distribution centers and customer supply centers when available
- Procures required stocks from vendors or suppliers when GSA items are not available
- Coordinates procurement of communications equipment and services in accordance with the Office of Science and Technology Policy (OSTP) National Plan for Telecommunications Support in Non-Wartime Emergencies
- Provides support to the GSA Regional Administrator for all Resource Support activities.

Vendors will also support logistics requirements via pre-existing contracts both at state and federal levels. During Phase 2a, Activation and Immediate Response, some vendors will be placed on standby to support resource and logistics needs as situational awareness develops. Other vendors tasked with critical lifesaving and life sustaining support may be activated immediately and deployed/employed with government responders. The private sector will have representatives in the SEOC via pre-arranged contracts to support resource and logistics needs.

4.2.2 Concept of Logistics Management and Resource Support

Annex D, Logistics Management and Resource Support, contains detailed information regarding the overall Concept of Logistics Management and Resource Support, commodities distribution, and support of lifesaving and life sustaining operations. Through auto-activation mechanisms and identification of the potentially sizable quantities of resources necessary to support response operations, agencies at local, state, and federal levels will continue to identify sources for particular resources and refine contracts and procedures for deploying those resources.

4.2.2.1 Logistics Management

FEMA Logistics Management staff will be deployed to establish the JFO, Staging Areas, and Incident Support Bases, and will determine availability of supplies and work with SEMA to identify and prioritize needs. FEMA will also establish Federal Mobilization Centers (FMC) to receive and pre-position commodities, equipment, and personnel for deployment. Commodities will remain under the NRCC's control until deployment to the affected area is required. FMCs are generally projected to hold 3 days of commodities. FEMA Logistics Management staff at the RRCC will coordinate the push of national and regional teams to the impact zone and will order additional resources and supplies through GSA as necessary.

As SEMA identifies resource requirements within the affected area, FEMA Region VII may deliver resources and transfer these to state control at any one of the following:

- Directly where the resource is needed
- Incident Command Post in a local jurisdiction
- Point of Distribution
- State Staging Area
- Incident Support
- Federal Mobilization Center.

4.2.2.2 Pre-Positioned Resources

FEMA has pre-positioned resources and also relies on resource dissemination from one of the five FEMA Logistic Centers in the United States. FEMA currently manages facilities that receive, store, ship, and recover disaster commodities and equipment. In the continental United States are five facilities located in: **REDACTED**. In addition are two facilities containing special products, computers, electronic equipment, and medical and pharmaceutical caches. All resources will be managed by FEMA's National Logistics System and pre-positioned at PODS.

4.2.2.3 Catastrophic Incident Supplement

Logistics Management and Resource Support provisions within this plan are consistent with the NRF Catastrophic Incident Annex (CIA), which establishes the context and overarching strategy for implementing and coordinating an accelerated, proactive national response to a catastrophic incident.

4.3 Funding

Disaster-related expenditures and obligations of state agencies and local political subdivisions may be reimbursed under a number of federal programs. The Federal Government may authorize reimbursement of approved costs for work restoring certain public facilities after a major disaster declaration by the President or under the statutory authority of some federal agencies.

Federal financial support from the Disaster Relief Fund (DRF) is predicated on the Missouri requesting and receiving a federal emergency or disaster declaration. Financial support to the State will be based on the provisions of the Stafford Act. DRF funding may begin once an emergency declaration has been issued. However, certain activities are not funded by the Stafford Act. Surge funding may be available for NRCC and RRCC activation, National-Level IMAT deployment, and Disaster Assistance Employees prior to a Stafford Act declaration.

The lead federal agency will finance supporting federal agencies and response organizations through mission assignments. Receipt of a mission assignment authorizes deployment of personnel and assets. Agencies responding under their own statutory authority will be reimbursed through internal funding mechanisms. Additional information related to federal funding—via the Stafford Act, Federal-to-Federal support, applicable laws including provisions of the Economy Act, and regulations—is listed in the Region VII RAHP, Funding Sections. Initiatives that require additional resources, reallocation of existing resources beyond agency authorization, and/or an adjustment in department or interagency policies or strategic priorities will be coordinated interagency pursuant to HSPD-1, and submitted to the Office of Management and Budget for consideration.

5 OVERSIGHT, COORDINATION INSTRUCTIONS, AND COMMUNICATIONS

This section provides a general discussion of coordination, communication, and oversight with regard to the joint state/federal response. The UCG provides a mechanism for multiple agencies to work together with common objectives. The UCG effectively manages the joint state/federal response to the earthquake and ensures that all decisions will be based on mutually agreed-upon objectives. To achieve the common objective of effective incident management, the UCG directs combined state and federal operations using UC principles. All activities will be consistent with the NRF, RAHP, Missouri SEOP, SEOC SOG, and SACC SOG built upon NIMS concepts.

5.1 Oversight

5.1.1 Local Governments

Local governments (county and city) are responsible for management and coordination of the emergency response and recovery activities within their jurisdictions. At the field response level, emergency response personnel and resources, under the command of the jurisdiction having authority, carry out tactical decisions and activities in direct response to the earthquake. In general, the Incident Commander is a local government official, although other entities may have specific authority to assume that role. A UC may be formed depending on the specific circumstances of the incident.

5.1.2 State Emergency Management Areas A through I

Missouri is divided into nine emergency management Areas A through I (refer to Figure BP-8). Areas A through I coordinate information, resources, and priorities among local governments and serve as the coordination and communication link between the local and state governments. A SACC may be established to facilitate this process and operate similar to a multiagency coordination center.

5.1.3 State

The SEOC tasks and coordinates state resources in response to requests from the local/area levels, and coordinates mutual aid among the mutual aid regions and between the area and state levels. In accordance with SEOP, the Governor directs all state agencies to use their resources in response to the incident, and the DPS Director is responsible for coordination of the activities of all state agencies. These agencies, while operating under their respective authorities, take action in accordance with the objectives identified by the UCG.

5.1.4 Federal

The Federal Government provides resources and support in response to requests from states. In accordance with the NRF, the FCO, on behalf of the President, is responsible to coordinate the federal response. Federal agencies and departments, working through ESFs and Mission Assignments from

FEMA, take action in accordance with the objectives identified by the UCG. Federal resources may be placed under the control of the field-level IC. Some resources, such as those at ISB or teams responsible for implementing federal programs, may remain under the control of the UCG. The RRCC has an oversight and coordination relationship with all the state-level UCGs in the Region.

5.1.5 Military Resources

The DoD may be tasked by FEMA (through a mission assignment), and MONG may be tasked by SEMA (through a mission task), to provide resources in support of the response. However, once these assignments have been issued, DoD and MONG elements carrying out missions remain under the control of the Secretary of Defense and the Governor, respectively. Their operations in the field are directed by one or more task forces or joint task forces operating under proper state and federal authority. State and federal military resources will be coordinated with civilian resources to achieve unity of effort through the IAP process. The DCO will serve as the link between the UCG and the Task Force Commander.

5.2 Coordination Instructions

State and federal actions in support of field-level response are coordinated through the joint state/federal organization under the oversight of the UCG and the direction of the Operation Section Chief. The UCG is initially formed virtually and will subsequently convene at the SEOC upon arrival of the federal IMAT. When the JFO facility can function adequately to support response and recovery operations (the move is targeted for E+72 hours), the UCG will transfer to the JFO. Joint state/federal operations are organized according to ICS principles.

SEMA coordinates requests for supplemental intrastate and interstate mutual aid assistance. However the response to a catastrophic NMSZ earthquake will require a greater level of interface between the field element and the FCO heading up the joint state/federal IMAT organization. The unique coordination and communication requirements will be met by deploying FEMA Branch Directors to the SACCs and Division Supervisors at the county level to support verbal information exchange. Deployment of Branch Directors and Division Supervisors does not replace existing state-level coordinating structure, but rather provides a temporary, earthquake-specific direct line of communication between the SACCs and the joint State/Federal Operations Section. The Branch Director will serve as the single point of contact for requests and acquisitions of supplemental federal resources for an impacted SACC.

5.2.1 Coordination with Other State and Federal Agencies

Supporting state agencies, federal agencies (including agencies organized according to ESEs), NGOs, private-sector organizations, and volunteers may be directly integrated into the joint state/federal organization or designated as resources through the IAP process for specific assignments. State and federal mission coordinators, working under the direction of the joint Operations Section Chiefs, provide mission assignments (federal agencies) or mission taskings (state agencies) as required. A Liaison Officer serves as the primary point of contact with agencies not directly integrated into the joint state/federal organization, and coordinates with agency representatives who have responsibility to monitor involvement of these agencies in the operation.

State and federal agencies may respond to the earthquake under their own authorities. Once the UCG is established, these activities must be incorporated with the joint state/federal organization so that they can be accounted for in the IAP process.

5.2.2 Coordination with Local and State Governments

Missouri's system to manage emergencies and provide support and resources to local governments is governed by the SEOP and Missouri Disaster Logistics Plan. In general, SACCs and local EOCs transmit

information and resource requests via emergency communications protocols, although other mechanisms may be used if the stakeholder's access to the web-based system is compromised.

In accordance with Missouri statutes, local requests for assistance of state agencies, the EMAC, or the Federal Government must be made through SEMA. Consequently, within the UCG, SEMA maintains responsibility to:

- Maintain coordination with regional (Areas A through I) and local entities, such as individual counties, communities, or SACCs, and receive information and requests for resources from these entities
- Coordinate mutual aid requests and the flow of resources through the mutual aid system
- Broker resource requests within or among Areas A through I
- Task state agencies to provide resources in response to local government requests
- Obtain resources from other states through state-to-state mutual aid and EMAC.

As described in Annex A, Federal Division Supervisors deploy to the SACCs to support integration and utilization of resources at the local level. The Federal Division Supervisors provide a direct means of coordination and assistance with situational awareness and formulation of resource requests. The Federal Division Supervisors will support submittal and coordination of resource requests following the earthquake by providing forward-located state/federal representation at the SACC.

5.2.3 Coordination of State and Federal Military Resources

MONG may be tasked by SEMA to provide resources in support of the response. Missouri may also request support from National Guard units in other states through SEMA as the authorized representative to activate the EMAC system. MONG and National Guard personnel from other states will respond in a Title 32 duty status and remain under the control of the Governor via The Adjutant General (TAG). Field operations will be directed by one or more Task Force Commanders or Joint Task Force Commanders operating under proper state authority. Potential missions for MONG and National Guard personnel from other states include:

- Ground, air, and water transportation
- Search and rescue
- Support to law enforcement agencies/security
- Medical services
- Communications
- Engineering
- Water purification
- Logistics management/distribution
- Damage assessment/aerial reconnaissance.

DoD may be mission assigned by FEMA to provide resources in a Title 10 duty status for Civil Support operations. Once these assignments have been issued, DoD personnel carrying out missions will remain under the control of the Secretary of Defense via U.S. Northern Command. Their operations in the field will be directed by one or more Task Force Commanders or Joint Task Force Commanders operating under proper federal authority. The DCO will serve as the link between the UCG and the Task Force Commander.

Potential missions for DoD personnel in a Title 10 status are similar to those of the National Guard except for the limits on domestic law enforcement imposed by the Posse Comitatus Act of 1878. Due to their greater capabilities, DoD organizations may be tasked to deliver extraordinary services in areas such as power generation/water purification, enhanced field-level medical services, and airlift.

Neither state nor federal military authorities have incident command responsibilities, but as described above, provide command and control for military resources through one or more task forces or joint task forces. State and federal military resources will be coordinated with civilian leadership to achieve unity of effort through the IAP process carried out under the oversight of the Operation Section Chief.

5.2.4 Coordination with Tribal Governments

No federally-recognized tribes are within Missouri.

5.2.5 Coordination with Other States

SEMA is responsible for procuring out-of-state resources through either state-to-state mutual aid or EMAC. Initially, this process occurs at the SEOC, where decisions to request resources from other states or through EMAC are made based on whether local, mutual aid, or state agency resources are otherwise available. As the joint state/federal organization shifts to the JFO, the decision to request resources from other states or through EMAC is made by the SEMA SEOC Operations and/or Logistics Sections as part of the process to evaluate the availability of resources to carry out operational objectives. SEMA establishes an EMAC coordinator in the Operations or Logistics Section, or both, to request resources through EMAC.

5.3 Communications

This section provides a general discussion of incident communications. Refer to Annex C, Appendix 2 for additional information.

5.3.1 Emergency Communications

The earthquake is expected to cause significant damage to public safety and commercial communications systems. Additionally, deployment of resources to Areas C and E will necessitate establishment of a communication system to support the response. As described in Annex C, Appendix 2, these circumstances require immediate deployment of communications assets. Establishment of interoperable emergency communications is a priority for the first 72 hours after the earthquake.

Initial communication restoration targets will focus on establishment of communication capabilities for emergency response operations including satellite, voice-radio, and mobile/cellular systems. Communications will be established to link components of the joint state/federal organization, including the SEOC, SACC, JFO, ISBs, other staging areas, and response teams in the field. Federal mobile communications assets will deploy in support of this effort. These assets will also be used to provide support for state and local communications systems as required. Annex C provides additional details on joint state/federal efforts to establish and sustain emergency communications systems.

5.3.2 Intelligence and Information Sharing Protocols

The UCG formulates joint objectives and implements a joint IAP process based on a COP. Decision makers with the responsibility to implement this plan will require critical information prior to rendering key decisions. The COP is achieved through a formal reporting methodology managed by the joint Planning Section in cooperation with the RRCC Watch Desk, the NRCC, and individual response agencies. The MIAC will provide Missouri's intelligence. The joint Planning Section, operating from the SEOC, will implement an Information Plan based on defined EEI to provide the basis for gathering and analyzing available information. EEI for the earthquake are provided in Annex B.

5.3.3 External Communications

At the state level, DPS is responsible to develop and release information about emergency operations to the news media, to personnel involved in the operation, and to other appropriate agencies and organizations. The Missouri DPS PIO at the SEOC initially activates and directs public information procedures. Coordination with federal, state, and local entities is necessary to ensure accuracy and consistency in the delivery of emergency public information messages.

Immediately following the earthquake, the DHS Assistant Secretary of Public Affairs activates ESF-15, External Affairs. ESF-15 provides operational, strategic, logistical, and administrative support for external affairs related to federal operations. ESF-15 is responsible for public and congressional affairs, coordination of state and local affairs, community relations, international affairs, and coordination with the private sector. The emergency public information effort focuses on developing and delivering lifesaving, life-preserving messages and other disaster and program information to the affected population. Refer to Annex C, Appendix 15 for more detailed information regarding external affairs.

6 Plan Maintenance

FEMA Region VII, Response Division, Planning Branch, is responsible for maintenance, update, and dissemination of this OPLAN and accompanying RAHP. Working with SEMA, FEMA will evaluate the OPLAN biannually and modify the plan per changes in laws, regulations, policies, procedures, state or federal systems, after action reports (AAR), and lessons learned from major activations and exercises. The SEMA Earthquake Program Manager will provide technical assistance to the appropriate state officials about their responsibilities in earthquake planning. FEMA and SEMA will distribute the revised document to the appropriate local, state, federal, and private-sector entities.

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

Annex A, Task Organization

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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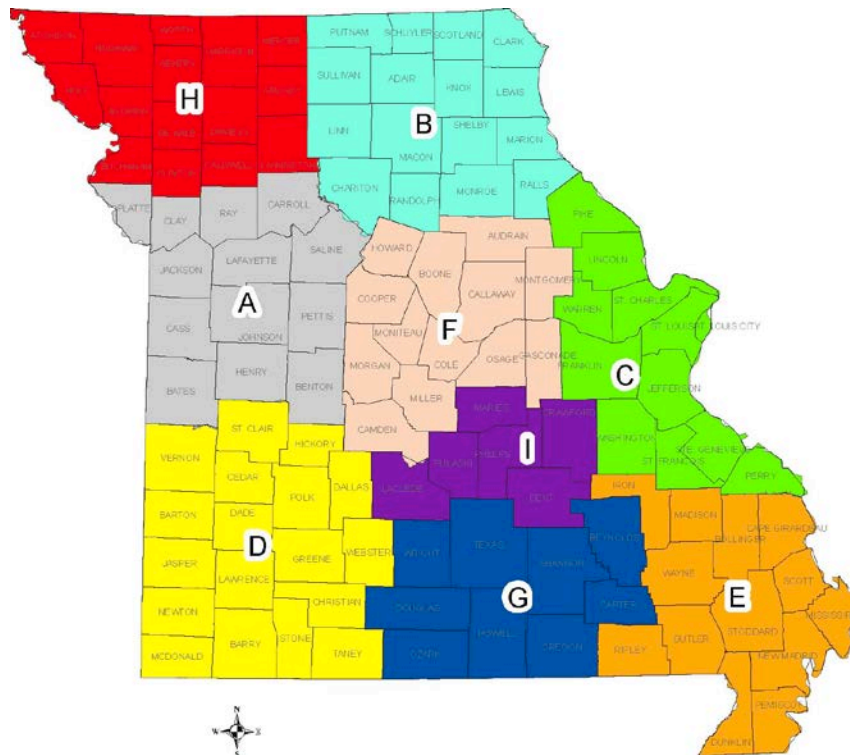
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1.0 Situation

This task organization annex provides additional information regarding the joint state/federal organization, led by the Unified Coordination Group (UCG), which manages state and federal operations in response to a catastrophic incident involving a New Madrid Seismic Zone (NMSZ) incident. This will facilitate unity of effort and accomplishment of the UCG objectives. Response will align with Missouri's Emergency Management Regions. Particular emphasis will be placed on Areas C and E, where the most damage is expected to occur.

Figure A1 Missouri Planning Regions



1.1 Purpose

This Annex:

- Describes an overall UCG coordination strategy
- Defines key roles and responsibilities
- Defines key operational and planning processes.

1.2 Considerations

The doctrine of tiered response (as outlined within the National Response Framework [NRF], January 2008) emphasizes incidents must be managed at the lowest possible jurisdictional level and supported by additional capabilities when needed. As such, this Operational Plan (OPLAN) fully acknowledges the standard emergency management architecture of local to state to federal. Incidents generally begin and end locally, and most are managed at the local level. A catastrophic earthquake will require unified response from local, state, and federal agencies, non-governmental organizations (NGO), and the private

sector. The joint response protocols outlined in this annex recognize this and are structured to provide critical resources and capabilities to support and sustain the response and recovery activities. All levels should be prepared to respond, anticipating resources that may be required.

This OPLAN recognizes the Missouri State Emergency Operations Plan (SEOP), NRF, Region VII Regional All-Hazards Concept of Operations Plan (CONPLAN), National Incident Management System (NIMS), and Incident Command System (ICS). It is consistent with agency standard operating procedures (SOP), operational manuals, field operating guides, and other agency practices. Several additional factors should be considered during OPLAN implementation to address response and recovery, which include but are not limited to:

- Resources will be prioritized first for saving and sustaining human life, protecting public health and safety, and then for environmental protection for all mission areas of prevent, protect, response, and recovery efforts.
- Coordination and adjudication is expected, as eight states will be competing for resources.
- Federal and state agencies, departments, and offices may have specialized authorities, resources, capabilities, or expertise required to support response operations.
- All applicable laws and legal requirements will be adhered to in conducting response and recovery activities.
- Executive orders will be issued to alter existing legal requirements in order to expedite response.

1.3 Assumptions

Applicable assumptions are considered in the Base Plan of this OPLAN. Refer to Base Plan Section 1.6 for additional details.

2.0 Mission

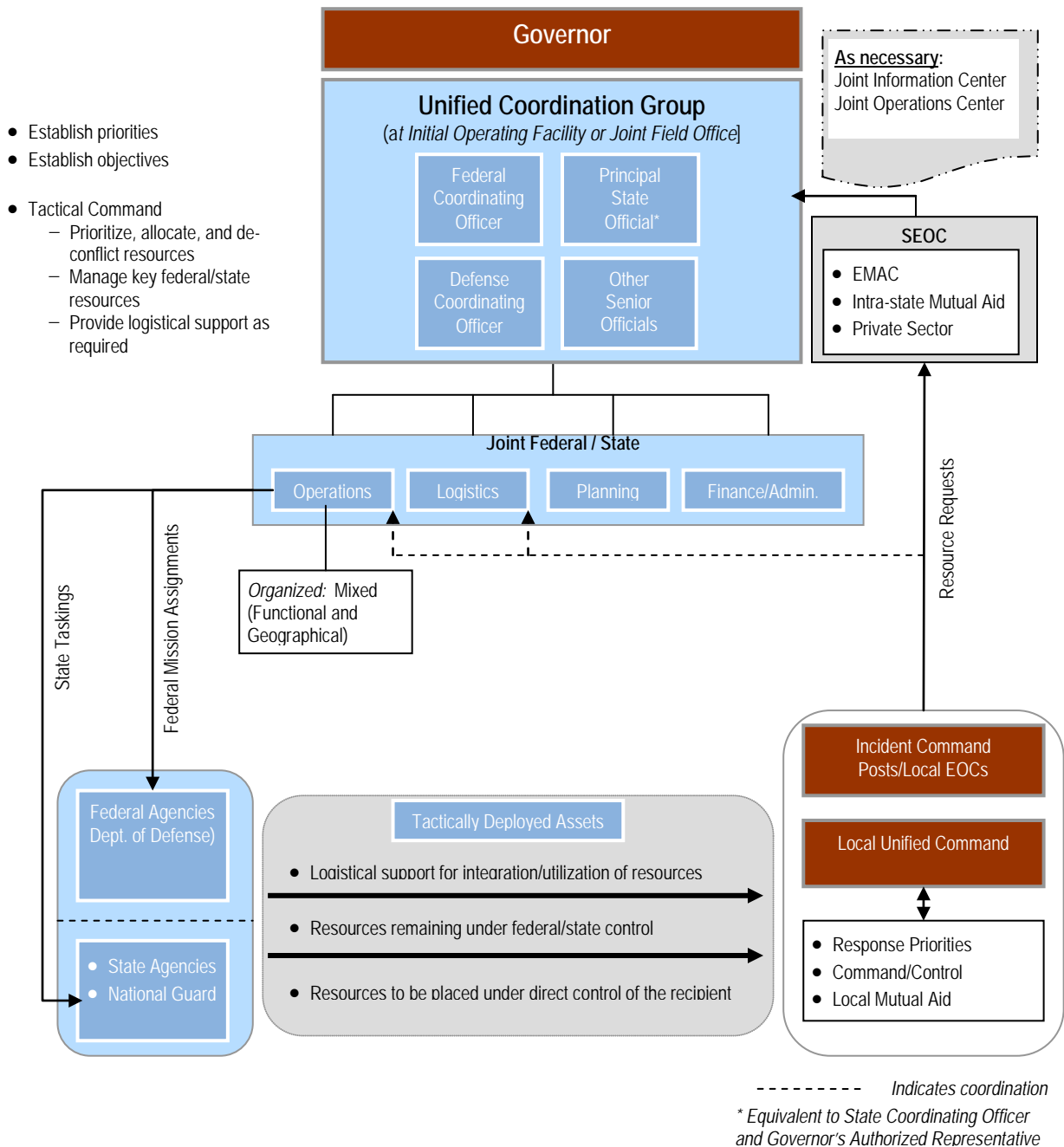
The mission of the UCG is to save and sustain human lives, minimize suffering, stabilize and restore critical infrastructure and key resources (CI/KR), and set the condition for recovery following a catastrophic earthquake in the State of Missouri.

3.0 Execution

The Missouri State Emergency Management Agency (SEMA) and Federal Emergency Management Agency (FEMA), Region VII will form a UCG to manage the incident. Using a phased approach consistent with the Missouri SEOP and Region VII CONPLAN, the UCG will set and accomplish objectives tailored to the unique circumstances and conditions in the State of Missouri, as detailed in Annex C: Operations.

Task organization will be consistent with the principles and concepts outlined in the NRF and NIMS. The task organization for a NMSZ scenario depicts relationships, coordination, and communications as these pertain to the mission areas and the three phases of earthquake response operations (Activation, Employment/Deployment, and Sustainment), as identified in the OPLAN. Figure A-2 shows the organization of the UCG.

Figure A2 Unified Coordination Group



3.1 Joint Field Office

The joint Field Office (JFO) is the primary federal incident management structure located in close proximity to the disaster area. It is a temporary federal facility that provides a central location for coordination of federal, state, local, private sector, and NGOs with primary responsibility for response and recovery. The JFO structure is organized, staffed, and managed in a manner consistent with NIMS principles and is led by the UCG. The JFO will be established at an agreed-upon location that offers sufficient space to accommodate the appropriate representatives.

The JFO is scalable and expands as necessary to accommodate the requirements of a particular threat or incident. Personnel from federal and state agencies, departments, and offices, other jurisdictional entities, the private sector, and NGOs may be requested to staff various positions in the JFO, depending on the requirements. Key roles and responsibilities within the JFO structure are as follows:

UCG will be the joint state and federal organization located in the JFO, in accordance with NIMS Unified Command (UC) principles. The UCG will facilitate effective utilization and integration of state, federal, NGO, and private sector resources through unity of effort, and will set priorities and objectives through use of a joint Incident Action Plan (IAP). The state-level UCG representatives will account for state resources. Any federal resource issues that cannot be resolved at the UCG level will be forwarded to Region VII for adjudication, and issues that cannot be resolved at Region VII will be elevated to FEMA Headquarters (HQ) for adjudication.

The **Principal State Official (PSO)** will be empowered by the Governor to coordinate Missouri disaster assistance efforts with those of the Federal Government. The PSO will serve a critical role in managing the State's response and recovery operations following Stafford Act declarations. The Missouri Department of Public Safety (DPS) Deputy Director is pre-designated as the PSO. Often, a SEMA representative will be designated by DPS to serve in the capacity of the State Coordinating Officer (SCO).

The **SCO**, often a SEMA representative, will be designated by the PSO to serve in the capacity of the SCO. As the Governor's Authorized Representative, the SCO will be the focal point of coordination within the UCG, ensuring overall integration of state emergency management, resource allocation, and seamless integration of state activities in support of, and in coordination with, local efforts and requirements.

The **Federal Coordinating Officer (FCO)** will be a senior FEMA official specifically appointed to coordinate federal support in the response to and recovery from major disasters. The FCO will be the primary federal representative with whom state and local response officials interface to determine the most urgent needs and set objectives for an effective response in collaboration with the UCG. The FCO will be the focal point of coordination within the UCG, ensuring overall integration of federal emergency management, resource allocation, and seamless integration of federal activities in support of, and in coordination with, state requirements. For Stafford Act incidents, upon the recommendation of the FEMA Administrator and the Secretary of the Department of Homeland Security (DHS), the President appoints a FCO. The FCO executes Stafford Act authorities, including commitment of FEMA resources and a mission assignment to other federal agencies. The FCO takes appropriate action to ensure that all of the federal agencies are carrying out their appropriate disaster assistance roles under their own legislative authorities and operational policies.

The **Defense Coordinating Officer (DCO)** will be the U.S. Department of Defense (DOD) single point of contact for the UCG. DOD is considered a support agency to all Emergency Support Functions (ESF). The DCO does not exercise command and control of Northern Command (NORTHCOM), but rather validates mission assignments.

The organization at the JFO will incorporate joint state and federal Planning, Operations, and Logistics Section Chiefs. The Finance and Administration Section will maintain separate state and federal sections due to different funding sources and tracking systems. Joint state/federal operations will be organized geographically to include staffing for branches and divisions, depending on function, span of control, and extent of damage.

The **Planning Section** will be responsible for acquisition, evaluation, dissemination, and use of information about the incident and status of resources. Timely and focused planning in coordination with the Operations Section will provide the foundation for effective incident management. The JFO Planning Section will develop the IAP using the NIMS Incident Action Planning Process and other plans (e.g., transition plans, CONPLANs, and demobilization plans).

The **Operations Section** will coordinate requirements, tasks, and resources to meet UCG objectives. It will also issue mission tasks (state to state) and mission assignments (federal to federal) to provide support as required. The JFO Operations Section will include representatives from the activated ESFs and state and federal disaster assistance representatives (Individual Assistance and Public Assistance) as applicable.

The **Division Supervisor** will deploy to the operation center of an affected jurisdiction and coordinate with the on-site Emergency Management Director/on-site Incident Commander (IC). While the Division Supervisors will initially work from the operation center, they will transfer their operations to Branch Offices as these are established by SEMA and FEMA. As conditions allow, Federal Division Supervisors will deploy to the operational areas to support integration and utilization of resources at the local level. The Division Supervisors are federal emergency managers and operations specialists with the appropriate training for their assignments; they will report to Branch Directors within the Operations Section. Initially, only FEMA intends to staff Division Supervisors due to staffing shortages at the state level. FEMA Division Supervisors will also be accompanied by a Missouri National Guard Liaison Officer (LNO).

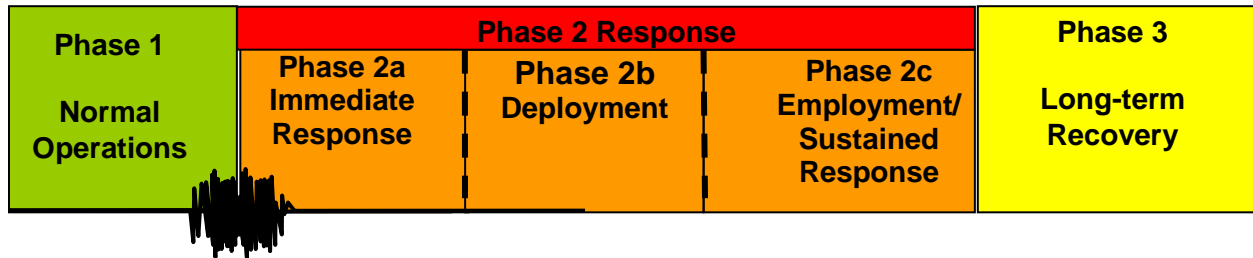
The **Logistics Section** will coordinate resource support and logistics management during an incident. JFO Logistics Section activities will support the objectives set by the UCG and include field level facilities (e.g., JFO, Disaster Recovery Centers, and responder support camps). In addition to the JFO and Branch Offices, movement of support resources will be to Staging Areas (SA), Incident Support Bases (ISB), and Points of Distribution (POD).

The **Finance and Administration Section** will be responsible for financial management, monitoring, and tracking of all costs relating to the incident. As previously stated, the Finance and Administration Section will maintain separate state and federal sections due to different funding sources and tracking systems. The JFO Finance and Administration Section Chief will advise the SCO/FCO on financial matters pertaining to the incident. The FEMA Disaster Finance Center and National Processing and Service Centers will support the JFO Finance and Administration Section as appropriate.

3.2 Planning Strategy

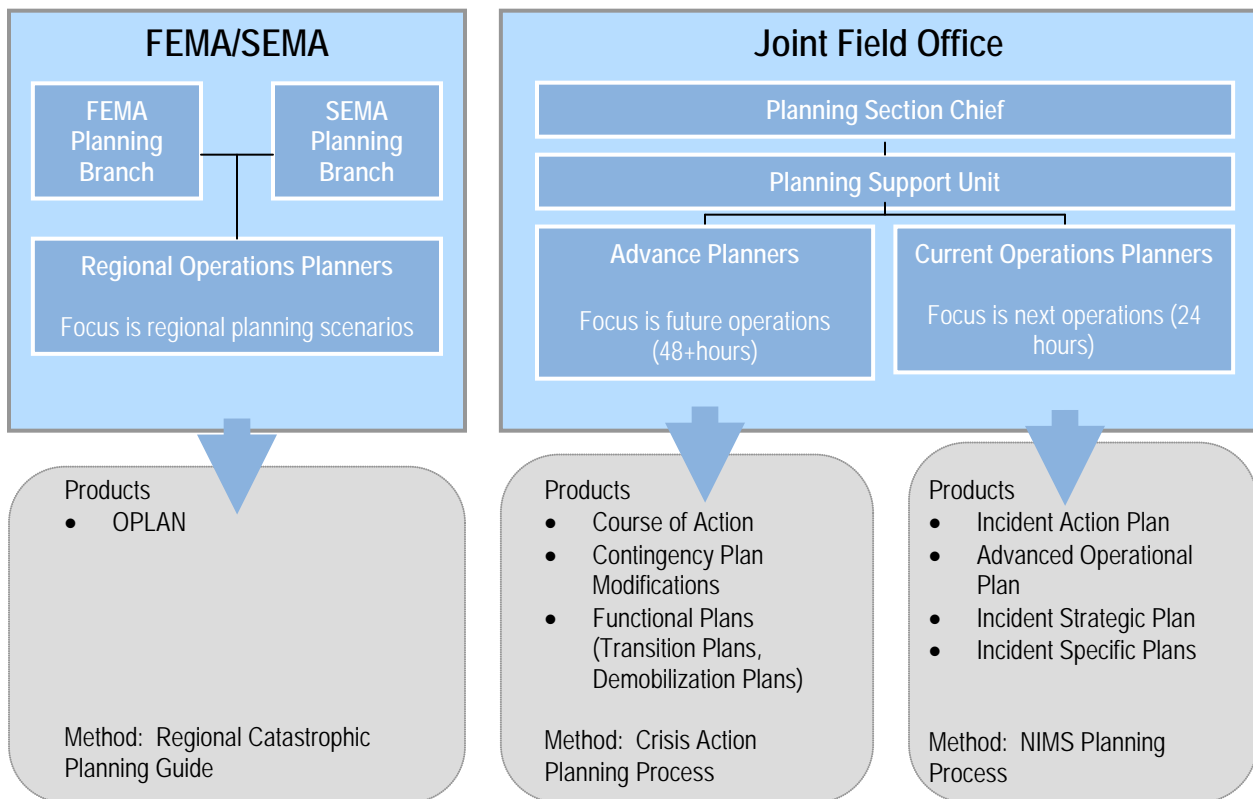
To ensure consistent compliance with Senior Leaders' intent, the OPLAN, developed by state and federal planners, will serve as the basis of all subsequent planning efforts. All earthquakes that exceed 4.5 Moment Magnitude (M_w) trigger initiation of this OPLAN in Phase 2a, and the incident will be managed using the execution checklist as a guide. Concurrently, SEMA will activate the State Emergency Operations Center (SEOC), and the FEMA RVII Incident Management Assistance Team (IMAT) will deploy and upon arrival will work with SEMA to develop the initial joint IAP. Advance planners will develop strategies for management of the incident and produce a planning order to guide the overall process and enable parallel planning. The planning process converts existing plans into executable strategies to manage the incident. Figure A-3 shows the planning phases.

Figure A3 Planning Phases



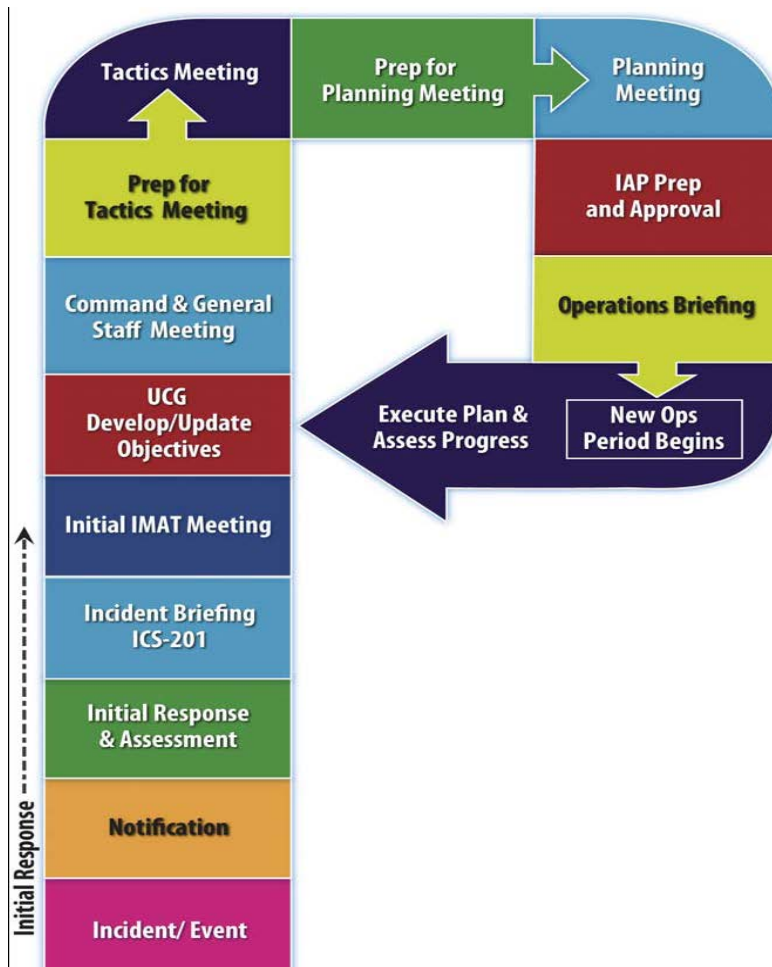
The current operations planning focus is on the next 24-hour operational period (O-Period). Advance planning looks beyond 48 hours and, as plans are developed, these are incorporated into the IAP. This process ensures that the Governor's and the UCG's intent, guidance, and priorities seamlessly transition from plan development to execution. Figure A-4 shows the planning strategy.

Figure A4 Planning Strategy



Incident Action Planning Process. The Incident Action Planning Process is used to develop the IAP, which specifies incident objectives and particular tactical actions for each O-Period. The joint state/federal Incident Action Planning Process begins with an initial briefing prior to assumption of command for an incident. Both Missouri SEOC and the Region VII Regional Response Coordination Center (RRCC) will monitor, collect, and review available situational information, and initial reports post-earthquake. The initial briefing will occur when the UCG is established and assumes command. Figure A-5 shows the planning schedule.

Figure A5 Planning Schedule



The “Initial Response” is a component of the planning process but not considered part of the planning cycle. The briefing package may take a variety of forms, but one of the tools available is the ICS Form 201, which can provide the incoming IMAT with basic information regarding the incident situation and the resources assigned. The ICS Form 201 may also serve as the initial IAP until the Initial Operating Facility (IOF)/Joint Field Office (JFO) joint state/federal Planning Section generates the initial joint IAP.

The **O-Period** is the period of time scheduled for execution of a given set of operation actions as specified in the IAP. The O-Period can be various lengths, but usually does not exceed 24 hours in the early stages of an incident/disaster. Incident action planning is always conducted in advance of the next O-Period. The UCG provides management direction to the Command and General Staff for the current O-Period planning cycle.

Incident objectives are established by the UCG based on input from the Command and General Staff and Annex C: Operations. Participants will discuss the strategies for accomplishing the objectives. The IAP cycle starts with development of objectives that, when combined with tasks from approved advance planning process plans, form the basis of the IAP.

Specific tactical actions are critical and must include sufficient details regarding task assignments, reporting locations and times, special equipment, and supply needs so the IOF/JFO Planning Section can develop the ICS Form 204 Assignment Lists in the IAP. The IOF/JFO Operations Section and appropriate Command Staff will identify and develop tasks and outline

resource assignments on the Operational Planning Worksheet (ICS Form 215). For the Operations Section, preparation of the ICS Form 215 will be typically delegated to Branch Directors and Group Supervisors. The draft ICS Form 215 for each Branch and Group will support incident objectives.

4.0 Administration, Resource, and Funding

Not Applicable

5.0 Oversight, Coordination Instruction, and Communications

Not Applicable

REDACTED

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

Annex B, Situational Intelligence

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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No Figures identified

1.0 Situation

Situational awareness is the basic building block for any response effort. Local, state, and federal emergency management officials are jointly responsible to make information available to the response community and the general population. Situational awareness includes understanding what has happened, how it has impacted the area, what actions have been taken, and what actions need to occur to reduce the impact of the event and restore normal activities. Planning includes activities that determine priorities for action, what actions must be taken next, and what resources will be committed. To respond to a catastrophic incident, planning will be a joint activity of Missouri State Emergency Management Agency (SEMA) and the Federal Emergency Management Agency (FEMA). SEMA and FEMA Region VII are responsible for obtaining and consolidating situational awareness information and data from all sources including local, state, and federal response partners, and working together to coordinate state and federal response to the New Madrid Seismic Zone (NMSZ) incident. Maintaining vertical and horizontal flows of information from federal, state, local, private-sector, and/or media sources to senior leadership and decision makers requires a disciplined approach to facilitate effective development of a common operating picture.

This Annex also describes the environmental effects of a catastrophic NMSZ earthquake based on the modeling used for this catastrophic scenario. The Mid America Earthquake (MAE) Center developed the model using best available science, and the joint effort of federal, state, and non-profit organizations. The scenario was selected following discussions with regional experts and recommendations from the United States Geological Survey (USGS). This scenario provides credible impacts for the NMSZ suitable for planning, as it represents one series of possible earthquakes and consequential impacts for the eight affected states and four FEMA regions. The hazard of greatest significance in this scenario is ground shaking resulting from rupture of all three New Madrid fault segments: the Northeast Segment, Reelfoot Thrust/ Central Segment, and Southwest Segment. Each segment is assumed to generate a deterministic Moment Magnitude (M_w) 7.7 earthquake caused by a rupture over the entire length of the segment.

The methodology of this earthquake impact assessment involved three major considerations: hazard, inventory, and fragility (or vulnerability). The hazard is ground shaking that causes transient and permanent ground deformation, as well as fire and flooding. The inventory comprises all assets including the built environment and population data. Fragility is a characterization drawn from a functional relationship between the severity of shaking and the likelihood of damage (designated as light, moderate, extensive, and near-collapse, for example). Social impact models also were included, referencing physical infrastructure damage results to estimate the effects on exposed communities.

Inventory is enhanced through use of the Homeland Security Infrastructure Program (HSIP) 2007 and 2008 Gold Datasets (National Geospatial-Intelligence Agency Office of America 2007). These datasets identify critical infrastructure and key resources (CI/KR) that are key components of earthquake impact assessment.

The assessment in this document utilizes MAE Center-developed transportation network flow models that estimate changes in traffic flow and travel time due to earthquake damage. Utility network modeling provides damage estimates for facilities and pipelines. An approximate flood risk model identifies areas likely flooded as a result of dam or levee failure. Social vulnerability identifies especially vulnerable populations due to factors such as age, income, disability, and language proficiency. Social impact models include estimates of displaced and shelter-seeking populations, and commodities and medical requirements. Finally, search and rescue (S&R) requirements quantify the number of teams and personnel required to search for trapped victims and extricate them.

According to the MAE Center data summarizing impacts within the 22 highest-impacted Missouri counties, the modeling associated with a M_w 7.7 will result in 87,000 buildings damaged and

44,000 buildings completely destroyed, including the following CI/KR: hospitals (7), fire stations (69), police stations (53), schools (136), bridges (1,004), and airports (28). Additionally, 6.5 million tons of debris will be created. The earthquake will displace 842,002 individuals (assuming an average of 2.7 persons per household), of which 237,991 will require emergency shelter. Specific emergency demands for each response organization are included in the relevant sections in Annex C.

Based on the compiled results of the modeling efforts presented here, state and federal response agencies can make informed decisions about emergency efforts following a catastrophic earthquake. The ability to reach decisions leading to effective response is enhanced by the comprehensive Decision Support Tool (DST) delivered with this Operational Plan (OPLAN). While the DST is not a substitute for actual intelligence, pre loading the MAE Center scenario CI/KR and expected damage data provides senior leadership with anticipated situational awareness. The common geography data sets for Missouri, specifically the southeastern portion, constitute a unified platform to view and query essential information for response and planning at the Missouri State Emergency Operations Center (SEOC) and Regional Response Coordination Center (RRCC) during the initial hours of the response.

1.1 Purpose

The purpose of this annex is to provide specific guidance regarding situational awareness and planning responsibilities of SEMA and FEMA. FEMA Region VII and SEMA will coordinate and facilitate situational awareness and planning relating to state and federal emergency responders following a catastrophic earthquake in Missouri.

- Describes an overall philosophy for developing the common operating picture
- Defines use of the DST
- Defines use of modeling software to predict incident impacts.

1.2 Considerations

Applicable considerations are considered in the Base Plan of this OPLAN. Specific to situational intelligence, the following considerations apply:

- Initial situational awareness in the impacted areas will be difficult to obtain, as infrastructure and communications will be damaged by the earthquake.
- Situational awareness may be compromised if SEMA does not have access to the Federal Homeland Security Information System (HSIN).

For additional details, refer to Base Plan Section 1.5.

1.3 Assumptions

Applicable assumptions are considered in the Base Plan of this OPLAN. Specific to situational intelligence, the following assumptions apply:

- Modeling used for this NMSZ incident will be sufficiently representative of a catastrophic scenario to identify required resources for each state.
- A detailed and credible common operating picture (COP) will not be achievable until 24-72 hours after the incident. Consequently, response operations must begin without the benefit of a detailed assessment of the situation and critical needs.

- The RRCC Watch will be responsible initially for gathering and synchronizing information from both the impacted areas and the overall region.

1.4 Limitations

Initial situational awareness in the impacted areas will be difficult to obtain, as infrastructure and communications will be damaged by the earthquake.

2.0 Mission

The mission is to maintain situational awareness of the incident to provide the UCG and Operation Sections at all levels the necessary information to understand the incident magnitude and intelligently commit limited resources to save and sustain human lives, minimize suffering, stabilize and restore critical infrastructure, and sets the condition for recovery following a catastrophic earthquake in the State of Missouri.

3.0 Execution

The Missouri SEMA and FEMA, Region VII will form a Joint Planning Section.

3.1 Concept of Operations

Once the Unified Command (UC) is organized and the integrated state/federal organization is established at the Initial Operation Facility (IOF)/Joint Field Office (JFO), responsibility for collection and use of situational intelligence for joint operations will be assumed by the joint state/federal Planning Section. The Situation Unit of the Planning Section will develop an Information Collection Plan (ICP) for gathering information from the sources cited in Section 1.0 above in a comprehensive and consistent manner as circumstances of the incident allow. The Planning Section will compile sources of information and provide validation and analysis to develop a COP that will be shared with local, state, and federal government operations centers and elected officials.

While information from all sources will be considered, the following sources will have priority in development of the COP:

- Reports from state and federal response teams and local and private-sector representatives at the field level
- Information obtained by SEMA from local and state agencies, State Area Coordination Centers (SACC), mutual aid coordinators, and the Post-Earthquake Technical Information Clearinghouse (PETIC).
- Earthquake data from :
 - National Earthquake Information Center, run by the USGS
 - Seismological laboratories at St. Louis University or the University of Memphis
 - Missouri Geological Survey

- PETIC¹, which will communicate field observations within a hours of the earthquake as research teams reach the affected area
- Predictive modeling based on sources that may include:
 - Loss estimation models based on actual earthquake data prepared by USGS, SEMA, FEMA, and others² using Hazards U.S. Multi-Hazards (HAZUS-MH)
 - Predictive modeling by the U.S. Army Corps of Engineers (USACE) of potential commodity requirements based on the magnitude of the earthquake
- Department operations centers of state agencies such as the Missouri State Highway Patrol (MSHP), Missouri Department of Transportation (MoDOT), Missouri Department of Health and Senior Services (MDHSS), and Missouri Information Analysis Center (MIAC)
- Emergency operations centers (EOC) of federal agencies
- State and federal assessment teams such as state/federal Rapid Needs Assessment or Preliminary Damage Assessment teams
- Media reports.

Generally, the most accurate information is obtained from those on the ground, closest to the incident site. Incident commanders (IC) and the planning sections within their incident management teams are often reliable sources of information. Planning sections at various levels analyze the information and utilize it to provide useful situational intelligence for managers and senior leaders. This step is vital to obtain data necessary for decision makers to prioritize activities and for deployment/employment of critical, but often limited, resources.

3.2 Situational Intelligence Collection and Utilization

At the state and federal levels, initial efforts to gain situational awareness will occur at the SEOC and RRCC Watch. Once the UCG is formed and the integrated state/federal organization is established at the IOF/JFO, responsibility for situational intelligence collection and utilization is assumed by the joint Planning Section. The Planning Section will compile sources of information and provide validation and analysis to develop a COP shared with all stakeholders and the general public.

Because the extent of damage will not be uniform throughout the 47 counties, gaining situational awareness within Operational Areas (OA) will not be consistent, and the pace of response operations will vary. During the early stages of response, needs will far exceed resources requiring the UCG to prioritize resource allocation consistent with capabilities. A concern for the UCG will be to gain access to affected areas in order to ensure that sufficient resources are available for those areas where situational awareness is poorest and damage is likely the most severe.

¹ PETIC is a cooperative effort among the USGS, the Earthquake Engineering Research Institute, the National Science Foundation, FEMA, the California Seismic Safety Commission, and various research entities. Clearinghouse teams deploy to the affected areas to obtain data and assess the impact of the earthquake, particularly in terms of geology, structural damage, and impacts to lifelines. They may provide information that can be used to enhance situational awareness.

² SEMA, FEMA, USGS, and other entities may initiate HAZUS-MH modeling at the same time. The Shake Maps produced immediately following the earthquake may be imported into HAZUS-MH; and within 1 to 2 hours, HAZUS-MH may generate initial loss estimates and projections of demand for medical treatment, care and shelter, mass fatality operations, and logistical support. SEMA may request FEMA to produce the HAZUS-MH modeling in order to provide initial estimates.

3.3 Essential Elements of Information

Essential Elements of Information (EEI) are critical items of information required by senior leaders within a particular timeframe that, when related to other available information and situational intelligence, may be used to reach a logical decision. Generally, EEI revolve around critical data focused on the operational objectives established by the UCG. For example, EEI necessary during immediate response efforts may relate to the status of medical facilities, number of patients by categories, status of transportation systems, and status of utility infrastructure. To assist the UCG with formulation of appropriate joint objectives based on a COP, a formal reporting methodology must be enacted at all levels—including OAs, branches, divisions, and any state or federal organizations (such as assessment teams)—to focus collection efforts on EEI in order to prioritize the kinds of information required. A compilation of EEI and an earthquake-specific ICP is provided in Table B-1.

4.0 Administration, Resource, and Funding

Not Applicable

5.0 Oversight, Coordination Instruction, and Communications

Not Applicable

REDACTED

Table B1 Essential Elements of Information, Methodology/Source, Responsible Entity, Products, and Timeline

Essential Element of Information	Specific Information	Methodology/Source	Responsible Entity	Product	Timeline
Boundaries of Disaster Area (shaking/ liquefaction, landslides, plume, fires, flooding)	<ul style="list-style-type: none"> Geographic limits of damage Description of the severity of damage Estimated percentage of population evacuated or in need of evacuation 	<ul style="list-style-type: none"> Predictive modeling Decision Support Tool Remote/overhead sensing Aerial reconnaissance SEOC Reports Assessment teams On-scene reports Media 	<ul style="list-style-type: none"> Joint State and Federal Operations 	<ul style="list-style-type: none"> Geographic Information System (GIS) impact maps Situation report Status briefing 	<p>Initial estimate no later than 6 hours and updated every operational period</p> <p>Modeling data as soon as available</p>
Boundaries of secondary disaster areas (flooding, tsunami, fires)	<ul style="list-style-type: none"> Same as above 	<ul style="list-style-type: none"> Same as above 	<ul style="list-style-type: none"> ESF-5 	<ul style="list-style-type: none"> Same as above 	<ul style="list-style-type: none"> Same as above
Access Points to Disaster Area	<ul style="list-style-type: none"> Location of access points located Credentials needed to enter Best routes to approach the disaster area 	<ul style="list-style-type: none"> SEOC Reports FEMA State Liaisons MoDOT Reports MSHP and Law Enforcement Reports Operations 	<ul style="list-style-type: none"> Joint State and Federal ESF-1 	<ul style="list-style-type: none"> GIS maps Displays Briefings 	<p>Initial estimate no later than 6 hours and updated every 12 hours</p>
Jurisdictional boundaries	<ul style="list-style-type: none"> Cities Counties Congressional districts Special districts 	<ul style="list-style-type: none"> Existing maps GIS database 	<ul style="list-style-type: none"> Joint State and Federal ESF-5 	<ul style="list-style-type: none"> GIS maps Jurisdictional profiles 	<p>Initial estimate no later than 12 hours and updated every operational period</p>

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Annex B – Situational Intelligence

Joint Missouri & Region VII Response Operations Plan

Essential Element of Information	Specific Information	Methodology/Source	Responsible Entity	Product	Timeline
Socio-Economic Impacts	<ul style="list-style-type: none"> • Estimated population affected • Number of shelters open/population • Potential unmet shelter requirements • Number of homes affected (destroyed, damaged) • Percentage of banks functioning • Percentage of grocery stores open and able to meet the needs of the public • Percentage of pharmacies open and able to meet the needs of the public 	<ul style="list-style-type: none"> • Predictive modeling • GIS • Assessment teams • Reports from SEOC and other EOCs • Voluntary agency reports • Emergency Support Function (ESF)-6 reports • News media and other open sources 	<ul style="list-style-type: none"> • Joint State and Federal Operations 	<ul style="list-style-type: none"> • FEMA disaster information database Individual Assistance module • Situation briefing • Situation reports/maps • Displays • GIS products • Daily Intelligence Summary 	Initial estimate no later than 12 hours and updated every operational period
Socio-Political Impacts	<ul style="list-style-type: none"> • What congressional districts have been impacted 	<ul style="list-style-type: none"> • Existing Maps • Congressional Directories • GIS Database • Missouri Department of Social Services (MDSS) 	<ul style="list-style-type: none"> • Congressional Affairs 	<ul style="list-style-type: none"> • Jurisdictional Profiles • GIS products 	Initial estimate no later than 24 hours and updated every operational period
Seismic and/or other geophysical information	<ul style="list-style-type: none"> • Location of epicenter • Location of mud flows and land slides • Potential magnitude of aftershocks • Location of ground liquefaction sites • Potential for tsunamis 	<ul style="list-style-type: none"> • Remote sensing • USGS • USACE • Missouri Department of Natural Resources (MDNR) • SEOC reports • St. Louis University 	<ul style="list-style-type: none"> • Joint State and Federal Operations 	<ul style="list-style-type: none"> • GIS maps of affected areas • Situation briefings • Situation reports 	Initial estimate no later than 4 hours and updated every 6 hours

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Annex B – Situational Intelligence

Joint Missouri & Region VII Response Operations Plan

Essential Element of Information	Specific Information	Methodology/Source	Responsible Entity	Product	Timeline
Hazard-specific information (hazardous, toxic, and radiological issues; safety hazards)	<ul style="list-style-type: none"> Extent of fires Potential for (or extent of) flooding Number/estimate of collapsed structures potentially requiring Urban S&R Actual or potential for release of hazardous materials Actual or potential radiological incidents Affected locations and what these contain Actions being taken under the National Contingency Plan (NCP), if any Personal safety issues Public health concerns 	<ul style="list-style-type: none"> Assessment Team reports SEOC Reports Predictive modeling Centers for Disease Control and Prevention (CDC)/MDHSS Occupational Safety and Health Administration (OSHA) Nuclear Regulatory Commission (NRC) U.S. Environmental Protection Agency (EPA)/MDNR/Missouri Division of Fire Safety USCG 	<ul style="list-style-type: none"> Joint State and Federal ESF-5 Operations Safety officer 	<ul style="list-style-type: none"> GIS product depicting actual or potential threats Situation report Status briefing Daily intelligence summary Safety briefings/ messages 	Initial estimate no later than 4 hours and updated every 12 hours
Weather	<ul style="list-style-type: none"> Forecast post-incident and implications for impeding operations 	<ul style="list-style-type: none"> National Weather Service (NWS) 	<ul style="list-style-type: none"> Joint State and Federal Operations 	<ul style="list-style-type: none"> Status briefings Situation reports Daily intelligence summaries 	As soon as possible post-incident and ongoing as required
Demographics	<ul style="list-style-type: none"> Population of impacted areas Demographic breakdown of population including income levels, information on elderly and children Number/type of housing units in impacted areas Level of insurance coverage Unemployment levels Foreign languages spoken within greater than 1 percent of the population 	<ul style="list-style-type: none"> Mitigation Reports GIS Predictive modeling Commercial products Census data National Emergency Management Information System (NEMIS) 	<ul style="list-style-type: none"> Joint State and Federal Planning 	<ul style="list-style-type: none"> Jurisdiction profiles GIS analysis Regional analysis and summary 	Initial information no later than 24 hours following incident
Predictive Modeling Impact Projections	<ul style="list-style-type: none"> What HAZUS-MH models show for damage impacts and casualties 	<ul style="list-style-type: none"> HAZUS-MH outputs 	<ul style="list-style-type: none"> Joint State and Federal ESF-5 FEMA Mapping and Analysis Center 	<ul style="list-style-type: none"> GIS products 	No later than 3 hours following incident

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Annex B – Situational Intelligence

Joint Missouri & Region VII Response Operations Plan

Essential Element of Information	Specific Information	Methodology/Source	Responsible Entity	Product	Timeline
Initial Needs and Damage Assessments	<ul style="list-style-type: none"> • Reports of rapid needs assessment and preliminary damage assessment teams • Damages reported by local, state, and other federal agency EOCs • Requests for federal support from the State 	<ul style="list-style-type: none"> • Rapid needs assessment and preliminary damage assessment team reports • HAZUS-MH outputs • Open sources • Other federal agency situation reports • SEOC Reports • NEMIS 	<ul style="list-style-type: none"> • Joint State and Federal Operations 	<ul style="list-style-type: none"> • Situation briefings • Situation reports • GIS products 	Initial estimate no later than 6 hours and updated every 12 hours
Status of Communications	<ul style="list-style-type: none"> • Status of telecommunications service (including Internet and infrastructure, including towers) • Reliability of cellular service in affected areas • Potential requirement for radio/satellite communications capability • Status of emergency broadcast (TV, radio, cable) system and ability to disseminate information 	<ul style="list-style-type: none"> • SEOC/RRCC reports • State Liaison/Incident Management Assistance Teams (IMAT)/Federal Coordinating Officer (FCO) • State and Federal ESF-2 • News media/open sources • Telephone companies • National Communication System (NCS) member agencies • Oracle LECMap systems • Internet service provider/telephone companies • NCS member agencies 	<ul style="list-style-type: none"> • Joint State and Federal ESF-2 	<ul style="list-style-type: none"> • Situation briefings • Situation reports 	Initial estimate no later than 6 hours and updated every 12 hours

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Annex B – Situational Intelligence

Joint Missouri & Region VII Response Operations Plan

Essential Element of Information	Specific Information	Methodology/Source	Responsible Entity	Product	Timeline
Status of Transportation	<ul style="list-style-type: none"> • Status of area airports • Status of major/primary roads • Status of critical bridges • Status of railways • Status of ports • Status of evacuation routes • Status of public transit systems • Status of pipelines • Accessibility to most severely impacted areas • Debris on major roadways and bridges 	<ul style="list-style-type: none"> • SEOC/RRCC reports • ESF-1/U.S. Department of Transportation (USDOT)/MoDOT • Assessment team reports • Community relations • USACE • Remote sensing/aerial reconnaissance (Civil Air Patrol [CAP]) • Predictive modeling 	<ul style="list-style-type: none"> • Joint State and Federal ESF-1 	<ul style="list-style-type: none"> • Situation briefings • Situation reports 	Initial estimate no later than 12 hours and updated every 12 hours
Status of EOCs	<ul style="list-style-type: none"> • Status of local EOCs • Status of SEOC • Status of RRCC • Status of IMATs • Status of agency EOCs 	<ul style="list-style-type: none"> • SEOC/RRCC reports • ESFs/other state and federal agencies • Regional offices • Mission Assignments 	<ul style="list-style-type: none"> • Operations • Joint State and Federal ESF-5 	<ul style="list-style-type: none"> • Situation briefings • Situation reports • GIS products 	No later than 1 hour following incident
Status of CI/KR	<ul style="list-style-type: none"> • Status of potable and non-potable water and sewage treatment plants/distribution systems • Status of medical facilities (hospitals and nursing homes) • Status of schools and other public buildings • Status of fire and police facilities • Status of levees and dams 	<ul style="list-style-type: none"> • Predictive models • Remote sensing/aerial reconnaissance (CAP) • SEOC reports • RRCC • ESF-3 • ESF-8 • ESF-12 • GIS 	<ul style="list-style-type: none"> • Joint State and Federal Operations 	<ul style="list-style-type: none"> • Situation briefings • Situation reports • GIS products 	Initial estimate no later than 12 hours and updated every 12 hours

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Annex B – Situational Intelligence

Joint Missouri & Region VII Response Operations Plan

Essential Element of Information	Specific Information	Methodology/Source	Responsible Entity	Product	Timeline
Status of energy system	<ul style="list-style-type: none"> • Status of electrical generating facilities and distribution grid • Households/people without electric power • Status of natural gas transmission facilities and distribution pipelines • Households/people without natural gas • Status of refineries and gasoline and oil distribution systems 	<ul style="list-style-type: none"> • ESF-12/U.S. Department of Energy (USDOE/Missouri Public Services Commission (PSC) reports • NRC reports • Investor-owned utilities (e.g., Ameren UE) and municipal utility districts • Remote sensing 	<ul style="list-style-type: none"> • Joint State and Federal ESF-12 	<ul style="list-style-type: none"> • Situation briefings • Situation reports • GIS products 	Initial estimate no later than 12 hours and updated every 12 hours
Status of local operations	<ul style="list-style-type: none"> • State and local priorities 	<ul style="list-style-type: none"> • Local EOC reports 	<ul style="list-style-type: none"> • State Operations 	<ul style="list-style-type: none"> • Situation briefings • Situation reports 	Ongoing
Status of state and local operations	<ul style="list-style-type: none"> • State priorities • Major state operations in support of the local jurisdictions • EFSs that have been activated • Status of support received under the Emergency Management Assistance Compact (EMAC) 	<ul style="list-style-type: none"> • SEOC reports 	<ul style="list-style-type: none"> • State Operations 	<ul style="list-style-type: none"> • Situation briefings • Situation reports 	Initial determination no later than 6 hours following incident and updated every operational period
Status of Federal ESF activations	<ul style="list-style-type: none"> • Federal priorities • EFSs that have been activated • Major mission assignments that have been authorized 	<ul style="list-style-type: none"> • Operations Section • RRCC reports • Mission assignment lists 	<ul style="list-style-type: none"> • Federal Operations 	<ul style="list-style-type: none"> • Situation briefing • Situation report 	Initial determination no later than 3 hours following incident and updated every operational period

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Annex B – Situational Intelligence

Joint Missouri & Region VII Response Operations Plan

Essential Element of Information	Specific Information	Methodology/Source	Responsible Entity	Product	Timeline
Status of remote sensing operations	<ul style="list-style-type: none"> • Remote sensing missions requested • Target areas • Data availability • Whether a rapid assessment is being conducted • Areas being assessed • Report availability and format • Whether the Civilian Air Patrol has been activated • Where over-flights are being conducted • Other aerial reconnaissance missions in progress • Commercial remote sensing sources availability 	<ul style="list-style-type: none"> • CAP • USCG • USGS • U.S. Department of Defense (DOD) • National Aeronautics and Space Administration (NASA) • Private-sector entities 	<ul style="list-style-type: none"> • Joint State and Federal ESF-5 	<ul style="list-style-type: none"> • Remote sensing imagery derived products 	Ongoing
Status of donations/voluntary agency activities	<ul style="list-style-type: none"> • Whether a donations hotline has been established or whether the hotline is needed • Voluntary agencies actively involved in operations 	<ul style="list-style-type: none"> • Missouri Voluntary Organizations Active in Disaster (VOAD) • Voluntary agencies • Agency/ESF reports 	<ul style="list-style-type: none"> • Joint State and Federal Operations 	<ul style="list-style-type: none"> • Situation briefing • Situation report 	No later than 12 hours following disaster declaration; updated every operational period

REDACTED

Annex B – Situational Intelligence

Joint Missouri & Region VII Response Operations Plan

Essential Element of Information	Specific Information	Methodology/Source	Responsible Entity	Product	Timeline
Status of key personnel/ personnel issues	<ul style="list-style-type: none">• Designation of Governor's Authorized Representative (GAR) and Principle State Official (PSO)/State Coordinating Officer (SCO) and location• Designation and location of FCO• Locations of IMAT team leaders• Locations of joint task force and Missouri National Guard (MONG) commanders• SEMA/FEMA personnel killed or injured• SEMA/FEMA personnel impacted by the incident• Staffing needs for response operations	<ul style="list-style-type: none">• SEOC reports• SEMA Reports• FEMA Reports• Media reports	<ul style="list-style-type: none">• Joint State and Federal Operations	<ul style="list-style-type: none">• Special reports to FCO and senior management	No later than 4 hours following disaster declaration; updated every operational period
Status of declarations	<ul style="list-style-type: none">• Status of local emergency declarations• Status of state emergency declaration• Status of Presidential declaration• Jurisdictions included• Types of assistance authorized• Special cost-share provisions regarding direct federal assistance	<ul style="list-style-type: none">• Local declarations• SEMA declarations• FEMA declarations• The White House	<ul style="list-style-type: none">• Joint State and Federal Operations	<ul style="list-style-type: none">• Situation briefing• Situation report• FEMA disaster information database reporting	As soon as information becomes available; updated every operational period

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Annex B – Situational Intelligence

Joint Missouri & Region VII Response Operations Plan

Essential Element of Information	Specific Information	Methodology/Source	Responsible Entity	Product	Timeline
Priorities for mitigation	<ul style="list-style-type: none"> • Approved mitigation projects in the declared disaster area • Change to cost/benefit of the pre-approved project • Likely repair costs that will be substantial, exceeding 50 percent of structure value) 	<ul style="list-style-type: none"> • FEMA disaster information database • Community information • System and model projections • Remote sensing • Preliminary damage assessments and/or inspection teams 	<ul style="list-style-type: none"> • Joint State and Federal Mitigation 	<ul style="list-style-type: none"> • Situation briefing • Situation report 	No later than 48 hours of incident
Priorities for response/upcoming activities	<ul style="list-style-type: none"> • State operational priorities • Federal operational priorities • Priorities: water, food, power, medical, S&R, communications 	<ul style="list-style-type: none"> • SEOC/RRCC/IOF reports • Rapid needs assessment team reports • Community relations field reports • State and Federal ESF reports • Elected officials 	<ul style="list-style-type: none"> • Joint State and Federal Operations 	<ul style="list-style-type: none"> • Incident Action Plan (IAP) • Situation briefings • Situation reports • GIS products 	Initial determination no later than 6 hours following incident and updated every operational period
Major issues/ shortfalls	<ul style="list-style-type: none"> • Actual or potential resource shortfalls of the affected counties • Anticipated requirements for federal resources • Potential or actual federal shortfalls • Potential sources for resource shortfalls • Resources available and where located 	<ul style="list-style-type: none"> • SEOC reports • Rapid needs assessment team reports • Community relations field reports • ESF reports 	<ul style="list-style-type: none"> • Joint State and Federal Logistics 	<ul style="list-style-type: none"> • Situation briefings • Situation reports • GIS products 	Initial assessment no later than 6 hours following incident and updated every operational period

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

Annex C, Operations

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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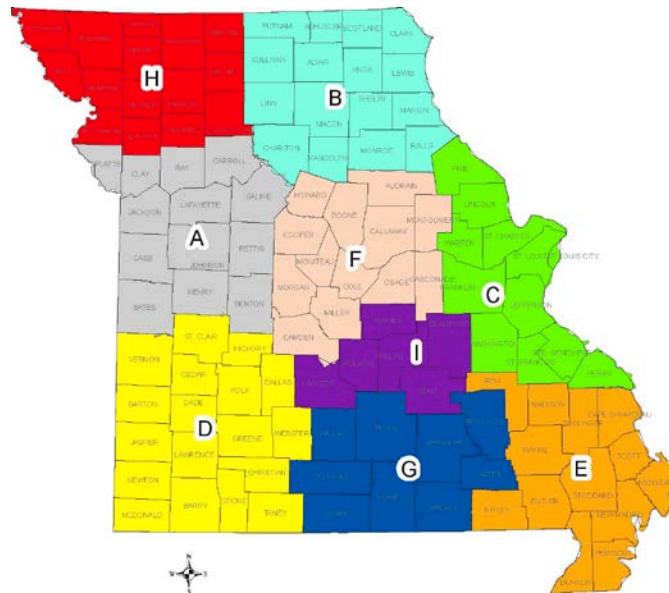
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1.0 Situation

In response to a major earthquake impacting the State of Missouri, the joint state/federal response organization will take actions to accomplish joint objectives specified in the Incident Action Plan (IAP) based on strategic priorities established by the Governor and national leadership. The Unified Coordination Group (UCG) will oversee the accomplishment of these objectives using a phased approach to set the conditions for recovery. Figure C1 shows the Missouri Planning Regions.

Figure C1 Missouri Planning Regions



1.1 Purpose

The purpose of this annex is to provide specific guidance regarding operational responsibilities of Missouri State Emergency Management Agency (SEMA) and Federal Emergency Management Agency (FEMA) Region VII, and their Emergency Support Function (ESF) partners. SEMA and FEMA Region VII will coordinate joint operations relating to state and federal emergency responders following a catastrophic earthquake in Missouri.

- Describes overall response strategy
- Describes disaster operations by phase
- Defines key tasks, objectives, and priorities by phase.

1.2 Objectives

The following 16 objectives have been identified as essential to support the mission:

- Establish incident organization and coordination.
- Establish and maintain interoperable emergency communications.
- Prioritize and conduct search and rescue (S&R) operations.
- Conduct hazardous material response and fire fighting operations.
- Conduct emergency debris clearance.

- Establish lines of supply and transportation.
- Provide mass care for the displaced population, including pets.
- Establish emergency medical and public health operations.
- Conduct initial damage and safety assessment.
- Provide security for the general population and first responders
- Restore critical infrastructure and public services.
- Disseminate emergency public information and warning.
- Obtain, deliver, and track resources to establish and maintain response operations.
- Provide evacuation support.
- Maintain continuity of local government within affected area.
- Conduct mass fatality operations.

2.0 Mission

The mission is to maintain a joint state/federal response organization is to support the needs of the impacted area by saving and sustaining human life, minimizing suffering, stabilizing and restoring critical infrastructure and setting conditions for recovery in Missouri following a New Madrid Seismic Zone catastrophic earthquake.

3.0 Execution

The Missouri SEMA and FEMA, Region VII, using principles of the National Incident Management System (NIMS), will form a UCG including a joint Operations Section to accomplish the response objectives. Using a phased approach consistent with other catastrophic planning initiatives, the UCG will set and accomplish objectives tailored to the unique circumstances and conditions in the State of Missouri.

3.1 Concept of Operations

To achieve the senior leaders' intent, SEMA and FEMA, in conjunction with local authorities where appropriate, will, through use of the UCG, execute a coordinated, effective, and synchronized effort to notify, activate, deploy, and employ local, state, and federal resources in response to a catastrophic earthquake incident. Key components of this concept of operations are establishment of the UCG, definition of roles and responsibilities for the critical command and control nodes, and rapid execution of response activities in accordance with well-defined phases. Operations will be conducted in accordance with statutory authorities and applicable plans and procedures.

In the case of a catastrophic incident, interdisciplinary resource requests will accumulate so quickly no single agency or organization can meet all resource requirements. In accordance with the Missouri State Emergency Operations Plan (SEOP), the State of Missouri will provide for orderly submittal of resource requests from the local emergency management directors to the State Emergency Operations Center (SEOC) in Jefferson City. FEMA will coordinate provision of supplemental federal assistance in accordance with the National Response Framework (NRF) at the request of the State, initially through an Incident Management Assistance Team (IMAT) deployed to the SEOC, the Initial Operating Facility (IOF), and subsequently through a Joint Field Office (JFO) established in proximity to the incident.

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Commodities, teams, and equipment may be pushed from a national level to federal Staging Areas in anticipation of requests from the State.

3.1.1 Methodology

Phasing is used in this plan as a methodology for preparation and response activities by local, state, and federal entities regarding a catastrophic event in Missouri. Successful joint state/federal response will be achieved by focusing response efforts in each phase on specific objectives, and on broad, strategic capabilities, functions, or goals. Decisive tasks will be established that, once met, contribute to the success of the operation. To meet the objectives, Courses of Action (COA) were developed that individuals, agencies, or departments may consider and execute as appropriate.

To meet the requirements of a catastrophic incident, the State and Federal Governments will jointly form a UCG, transitioning and consolidating incident-related operational elements of the SEOC and IMAT at the IOF/JFO. This is a decisive concept of operations task aimed at achieving the common objective of effective incident management.

The UCG does not assume responsibility for field-level Incident Command activities; instead, it provides a structure for the command, control, and coordination of state and federal resources not yet delivered to the counties, field-level Incident Command, or end users. The UCG directs coordinated, combined state and federal operations in accordance with NIMS/Incident Command Structure (ICS) Unified Command (UC) principles.

3.1.2 Unified Coordination Group

Table C-1 lists the Operations Centers.

Table C1 Operations and Coordination Centers

Name	Organization	Location	Function
Local Emergency Operation Centers	County/city offices of emergency services	Each county and/or city in Missouri	Coordinates support and resources among cities, county agencies, and special districts within a county's geographic area
State Area Coordination Centers (SACC)	SEMA and select agencies, departments, and offices	To be determined	If needed, coordinates or liaise with the sub- state response to the incident similar to a multi-agency coordination center
State Emergency Operation Centers (SEOC)	SEMA and all state agencies, departments, and offices	Jefferson City, Missouri	Coordinates the overall state response to the incident; provides state-level coordination of mutual aid systems; coordinates scarce state resources; and makes requests to the Federal Government and to other states for assistance
Regional Response Coordination Center (RRCC)	FEMA and all federal agencies, departments, and offices	Kansas City, Missouri	Serves as FEMA's immediate operations center; coordinates federal field response efforts until a Federal Coordinating Officer (FCO) assumes operational control; and supports deployment of an IMAT

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Annex C – Operations

Joint Missouri & Region VII Response Operations Plan

Name	Organization	Location	Function
National Response Coordination Center (NRCC)	FEMA	Washington, DC	Multiagency coordination center for national response and recovery operations that coordinates assignment of national-level resources and teams; and provides resources through mission assignments and other arrangements with federal agencies
Department of Homeland Security (DHS) National Operations Center (NOC)	DHS	Washington, DC	Facilitates information sharing; coordinates with other federal agencies; and provides situational awareness to senior DHS and White House leadership

Intergovernmental coordination will be achieved through a UCG and operation centers established to:

- Provide the leadership for multiple agencies to work together to effectively manage an incident or incidents
- Ensure that all decisions are based on mutually agreed-upon objectives, regardless of the number of agencies or jurisdictions involved.

See the FEMA Region VII All-Hazards Concept of Operations for additional details on UCG activities.

3.1.3 Phases of Response

The three phases of catastrophic response are: Pre-incident, Response, and Recovery. As part of the development of this Operational Plan (OPLAN), SEMA and FEMA identified objectives for the Response phase during the first 120+ hours after the earthquake (E to 120+ hours) specified as the following three (sub)phases:

- Phase 2a: Immediate Response: E to E+24 hours
- Phase 2b: Deployment: E+24 hours to E+72 hours
- Phase 2c: Employment/Sustained Response: E+72 hours to E+120 hours and beyond.

Phase 2a: Immediate Response Phase. This phase involves essential activities that must be completed rapidly upon notification of a catastrophic earthquake incident, or when directed by higher authorities. Though the gravity of the situation may not be well understood immediately, assessment and anticipation of resources that may be necessary for a response must occur quickly. Prudent decisions are necessary to activate the first responder organizations. Initial deployments of life saving and other response teams occur during this phase. To minimize loss of life and damage, a fundamental element of this phase is rapid deployment of key and essential personnel necessary to establish the command and control organizations that will facilitate unity of effort, such as emergency operations centers (EOC) and an initial operating facility for establishment of the UCG.

Phase 2b: Deployment Phase. This phase includes engagement of critical life resources and mobilization of critical resources. Teams will be deployed to staging areas at the incident site between 24 and 72 hours following the alert. This will require debris clearance along priority routes and use of rotary wing assets. Maturation of the logistical support systems also will occur during the deployment phase, including lines of supply to move commodities and responders into the affected area. Some initial emergency response disciplines, especially S&R, health and medical, firefighting, law enforcement, and

hazardous material response will become fully engaged by the end of the deployment phase. Incident coordination teams including the IMAT will also be engaged.

Phase 2c: Employment/Sustainment Phase. This phase includes deliberate, coordinated, and synchronized actions that stem from well-defined incident objectives established by the UCG. Successful execution of these actions will define success for the overall response. During the Response phase, the JFO and a deliberate planning process will be fully established. Response-related mission assignments will be issued and executed. Because catastrophic disasters will have a long-lasting impact on the affected area, it is crucial to anticipate, identify, and begin activities during the Response phase that will posture assistance and long-term recovery programs for success. As appropriate, government Continuity of Operations plans will be activated.

3.1.4 Interagency Response, Actions, and Activities

A key component of the joint state/federal organization is coordination and sequencing of operations at otherwise distinct state and federal operations centers. Within the three phases are specific objectives and actions critical to a response identified by:

- **Objectives:** Objectives are statements of desirable outcomes that are specific, measureable, and achievable with the resources local, state, and federal agencies can allocate to the incident. These objectives will be accomplished through coordinated and synchronized actions in a phased approach. They will be supported by an integrated and complementary logistics strategy (see Annex D: Logistics). Each objective is supported by a concept of operations described in an Appendix to this Annex C. Objectives drive development of COAs. All subsequent COAs should be specific actions that, when achieved, result in meeting the objectives.
- **COAs:** A COA is an activity that an individual, agency, or department may undertake to accomplish an objective. When several COAs are identified, they form a menu of activities for response entities to accomplish, modify, or disregard depending upon the actual situation. Selected COAs shaped the Appendices to this Annex. COAs are also known as mission-essential tasks in this OPLAN. Note: The phases below are listed sequentially; however, some aspects of the phases may routinely overlap. Additionally, the objectives and their COAs are not sequential. Depending on the incident and the required response, some objectives and COAs may not be necessary. Some objectives may apply across several phases. Several COAs are also linked to Execution Schedule Checklist items in Annex X.

3.1.4.1 Phase 2a: Alert/Notification

Phase 2a occurs immediately following a catastrophic earthquake, and response operations will start immediately. Actions undertaken during this phase are intended to organize the incident management organization, conduct a rapid needs assessment, and initiate life saving response teams. As soon as possible, the Governor of the State of Missouri will declare a State of Emergency and request a Presidential Declaration that, when approved, will include designation of a FCO and enable a coordinated joint local, state, and federal response within the authorities of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). Major objectives during this sub-phase include:

- **Take measures to establish incident organization and coordination.**
 - Locals activate emergency operations plans (EOP).
 - Activate SEOC and RRCC.
 - Initiate joint state/federal UCG.
 - Activate state and federal ESFs.
 - Activate and deploy specialized state and federal resources.
 - Activate Emergency Management Assistance Compact (EMAC) to request mutual aid.
 - Coordinate provision of services, equipment, and supplies to support expedient operations.

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- Activate State Area Coordination Centers (SACC).
- Deploy FEMA Type II IMAT.
- Deploy State Incident Support Teams (IST).
- Publish IAPs and Situational Reports (SITREP).
- Use pre-scripted Action Request Forms (ARF) and Requests for Assistance (REC A).
- Deploy Division Supervisors.
- **Establish and maintain interoperable emergency communications.**
 - Collect damage assessment reports to establish the extent of damage to the radio and information systems.
 - Initiate Regional Net Control Stations (RNCS) at Troop F, Jefferson City.
 - Follow DHS, FEMA, Region VII, 2010 Emergency Communications Plan, State of Missouri Annex.
 - Provide personnel to staff communications units at the state/federal command structures.
 - Establish radio coordination with responding disciplines.
 - Deploy Mobile Emergency Response Support (MERS) detachments to provide support and augmentation to state systems.
 - Deploy federal IMAT (Type II) to rapidly establish internal and external communications networks.
 - Deploy private-sector Cell on Wheels.
- **Prioritize and conduct search and rescue operations.**
 - Local search teams and/or volunteers mobilize and begin S&R efforts
 - Mobilize FEMA Urban Search & Rescue (US&R) assets
 - Initiate wide area and US&R activities
- **Conduct hazardous material response and fire fighting operations.**
 - Local fire and hazmat teams begin working in their jurisdictions.
 - Obtain fire and hazardous materials assessment data by the SEOC/SACC.
 - Activate fire and hazardous materials assets, and send these to staging to await tasking.
 - Assign resources for fire and hazardous materials response with priority to life saving missions.
- **Conduct emergency debris clearance.**
 - Assign debris clearance priorities based on life safety and critical infrastructure.
 - Begin immediate clearance of identified debris areas.
 - Initiate pre-existing contracts, private resources, and mutual aid agreements.
 - Consider actions to waive permits and fees.
 - Consider re-opening closed landfills.
- **Establish lines of supply and transportation.**
 - Begin immediate ground and air assessments.
 - Initiate temporary flight restrictions.
 - Establish access to primary transportation/supply routes.
 - Prioritize critical infrastructure for re-establishment.
 - Initiate dam inspections.
 - Identify alternate routes and temporary bridges.
 - Initiate regional re-routing plans.
- **Provide mass care for the displaced population, including pets.**
 - Activate mass care shelters within the impact zone and statewide.
 - Use public and private partnerships for the care and well being of pets and service animals.
 - Initiate bulk distribution of commodities to shelters and Point of Distribution (POD).
 - Implement coordinated feeding operations at each jurisdictional level.
- **Establish emergency medical and public health operations**
 - Coordinate with operational hospital in or near the impact zone to support critical needs.
 - Request state and federal Disaster Medical Assistance Teams (DMAT).

- Initiate alternate treatment sites/staging areas.
- Implement triage to determine patient and resource flow.
- Support ingress of necessary assets and egress of patients to appropriate treatment and care sites.
- Deploy Mobile Emergency Medical Systems (MEMS).

End State of Phase 2a

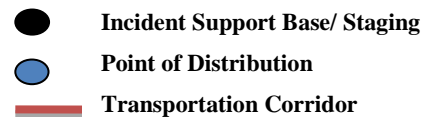
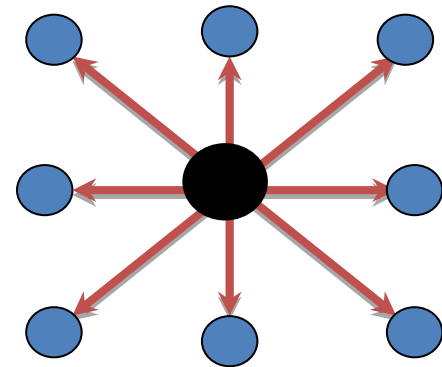
The end state of Phase 2a is attained when the UCG is staffed and adequate resources are notified to accomplish the key objectives. When these actions are accomplished, the operational readiness of the response organization is engaged and ready for deployment.

3.1.4.2 Phase 2b: Deployment

The core of the response deployment is a hub and spoke strategy supporting population centers. Staging areas will support hubs with commodities. Hub shelters will be focal points of support for command and control, medical services, and special needs assistance. Debris clearance and fuel delivery operations will support this strategy.

- **Conduct initial damage and safety assessment.**
 - Collect damage assessment reports to establish the extent of damage.
 - Conduct Civil Air Patrol (CAP) aerial search and assessment.
 - Support local emergency management initial damage assessment procedures.
 - Utilize SEOC as the point for acquisition and coordination of damage assessment.
 - Activate Missouri Structural Assessment & Visual Evaluation Team.
 - Support the joint state/federal Planning Section in developing a common operating picture.
 - Deploy state and federal teams for rapid needs assessment.
 - Conduct land-based damage assessment.
- **Provide security for the general population and first responders.**
 - Deploy state and federal law enforcement assets to help locals maintain order, secure areas, provide force protection, and control traffic.
 - Support the security of public facilities, staging areas, points of distribution, reception centers, and ingress and egress routes with Missouri National Guard (MONG) assets.
- **Restore critical infrastructure and public services.**
 - Evaluate energy restoration, suitability of water, sanitation, and utilities.
 - Conduct building and structure assessments.
 - Initiate coordination with public/private partnerships.
 - Activate Missouri Structural Assessment and Visual Evaluation (SAVE) Coalition.
 - Coordinate with the U.S. Department of Energy (DOE).
 - Deploy MONG, U.S. Army Corps of Engineers (USACE), and private-sector generators.
 - Issue permits and fee waivers.
- **Disseminate emergency public information and warning.**
 - Establish a Joint Information Center (JIC)/Joint Information System (JIS).
 - Deliver warnings, notices, and messages to population.
 - Distribute pre-packaged information.
 - Activate External Affairs component.
 - Conduct media viability assessment.

Figure C2 Hub and Spoke Model



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- Begin affiliation with private-sector partners, 211, and media options.
- Respond to public inquiries and local media.
- Prepare executive briefing and talking points.
- Involve private-sector resources to disseminate emergency public information and warnings.
- Initiate federal inter-governmental affairs activities.
- **Obtain, deliver, and track resources to establish and maintain response operations.**
 - Request federal commodities from Fort Worth, Texas (Denton Mobile Operation Center (MOC), Primary Region VII supply node); Atlanta, Georgia; Frederick, Maryland; Sunnyvale, California (Moffet Field); and Winchester, Virginia (Disaster Information Systems Clearinghouse located at the Mount Weather EOC).
 - Establish federal Incident Support Base (ISB) at Fort Leonard Wood.
 - Activate state and federal fuel contracts.

End State of Phase 2b

The end state of Phase 2b is attained when the UCG has resources and commodities positioned to support the local Incident Command. The primary corridors are established to move resources and personnel into the affected area and support evacuation of the general population requiring medical treatment or shelter.

3.1.4.3 Phase 2c: Employment/Sustained Response

The core of the response deployment is an ongoing hub and spoke strategy supporting population centers. Staging areas will support hubs with commodities. Hub shelters will be focal points of support for command and control, medical support, and special needs assistance. Evacuation support, fatality management, and bolstering of local government resources will be emphasized.

- **Provide evacuation support.**
 - Initiate SEOC Evacuation Management Team.
 - Engage Governor's Office to determine evacuation mandates.
 - Organize local ESF-6 resources.
 - Notify host cities of incoming survivors.
 - Develop a regional traffic plan.
 - Coordinate with local jurisdictions for “rest-areas” along route.
 - Identify host shelters.
 - Establish ingress/egress schedules.
 - Manage spontaneous evacuees.
 - Establish consumption rates and re-supply needs for ESF-6 mission.
- **Maintain continuity of local government within affected area.**
 - Activate local EOPs and Councils of Government, if available.
 - Deploy state, EMAC, and federal resources to assist local governments.
 - Assist with restoration of critical government functions.
 - Disseminate vital information concerning government services.
- **Conduct mass fatality operation.**
 - Request state and federal Disaster Mortuary Operational Response Team (DMORT).
 - Establish collection sites.
 - Establish temporary morgues.
 - Support Family Assistance Center operations.
 - Transport remains to collection sites.

End State of Phase 2c

The end state of Phase 2c will not be accomplished under this OPLAN. The transition to subsequent plans will occur when the UCG has developed and released a joint IAP to coordinate all local, state, and federal operations. Recovery plans will also be implemented during the later part of Phase 2c

3.1.5 Primary and Support Roles and Responsibilities

Tables C-2 and C-3 list the primary state and federal ESFs, respectively, responsible to implement each objective. Individual agencies, departments, and offices have been not been designated to allow for operational flexibility.

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Table C2 Incident Objective to State ESF Correlation

Objective	State Emergency Support Functions																
	ESF 1: Transportation	ESF 2: Communications	ESF 3: Public Works	ESF 4: Fire	ESF 5: Emergency Mgt	ESF 6: Mass Care	ESF 7: Resource and Logistics	ESF 8: Health and Medical	ESF 9: Search and Rescue	ESF 10: Haz Mat Response	ESF 11: Agriculture	ESF 12: Energy	ESF 13: Public Safety	ESF 14: Long-Term Recovery	ESF 15: Public Affairs	Missouri National Guard	Air Operations
Prioritize and conduct search and rescue operations									X								
Conduct hazardous material response and fire fighting operations				X*						X*							
Provide security for the general population and first responders													X				
Establish lines of supply and transportation	X*						X										X*
Restore critical infrastructure and public services			X									X					
Conduct emergency debris clearance	X		X														
Conduct initial damage and safety assessment					X												
Obtain, deliver, and track resources to establish and maintain response operations							X										
Establish and maintain interoperable emergency communications		X															
Establish incident organization and coordination					X												
Maintain continuity of local government within affected area					X												
Disseminate emergency public information and warning															X		
Provide evacuation support	X*					X*											
Provide mass care for the displaced population, including pets						X											
Establish emergency medical and public health operations								X									
Conduct mass fatality operations								X									

Table C3 Incident Objective to Federal ESF Correlation

Objective	Federal Emergency Support Functions															
	ESF 1: Transportation	ESF 2: Communications	ESF 3: Public Works	ESF 4: Fire	ESF 5: Emergency Mgt	ESF 6: Mass Care	ESF 7: Resource and Logistics	ESF 8: Health and Medical	ESF 9: Search and Rescue	ESF 10: Oil/Haz Mat Response	ESF 11: Agriculture	ESF 12: Energy	ESF 13: Public Safety	ESF 14: Long-Term Recovery	ESF 15: Public Affairs	Defense Coordinating Element
Prioritize and conduct search and rescue operations									X							
Conduct hazardous material response and fire fighting operations				X*						X*						
Provide security for the general population and first responders													X			
Establish lines of supply and transportation	X															
Restore critical infrastructure and public services			X									X				
Conduct emergency debris clearance	X															
Conduct initial damage and safety assessment					X											
Obtain, deliver, and track resources to establish and maintain response operations							X									
Establish and maintain interoperable emergency communications		X														
Establish incident organization and coordination					X											
Maintain continuity of local government within affected area					X											
Disseminate emergency public information and warning															X	
Provide evacuation support					X											
Provide mass care for the displaced population, including pets						X					X					
Establish emergency medical and public health operations								X								
Conduct mass fatality operations								X								

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**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C1
ESF-1 - Transportation**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

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FIGURE C1-8 AVIATION STAGING BASES (FIGURE REDACTED)	2

1.0 Situation

This annex to the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Operations Plan (OPLAN) defines the concept of operations for Emergency Support Function-1 (ESF-1) – Transportation following a catastrophic NMSZ earthquake. The effort involves a coordinated state/federal response. It will be essential to establish lines of supply and transportation to perform life saving and life sustaining measures immediately after the incident. Critical routes of transportation have been identified, and include roads, bridges, railways, airports, waterways, and ports. The Missouri Department of Transportation (MoDOT) is identified as the principal response organization for the State of Missouri, and the United States Department of Transportation (USDOT) will be the lead federal agency.

According to modeling data from the Mid-America Earthquake (MAE) Center, a NMSZ earthquake is expected to directly impact 22 Missouri counties and the City of St. Louis. While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire State, including the 47 counties recognized by the State as vulnerable to negative impacts by a seismic incident. This OPLAN also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties nor the effects of aftershocks are provided unless denoted. Table C1-1 lists projected damage. The following Figures C1-1 to C1-8 show routes, locations of vulnerable infrastructure, and locations significant for the response to an NMSZ earthquake.

Table C1-1 Projected Damage

Transportation Lifelines	Total Facilities	Estimated Number Damaged/Destroyed
Highway Bridges	27,258	1004
Railway Bridges	200	2
Railway Facilities	139	23
Bus Facilities	72	5
Port Facilities	232	52
Airport Facilities	562	28

Figure C1-1 Priority Routes

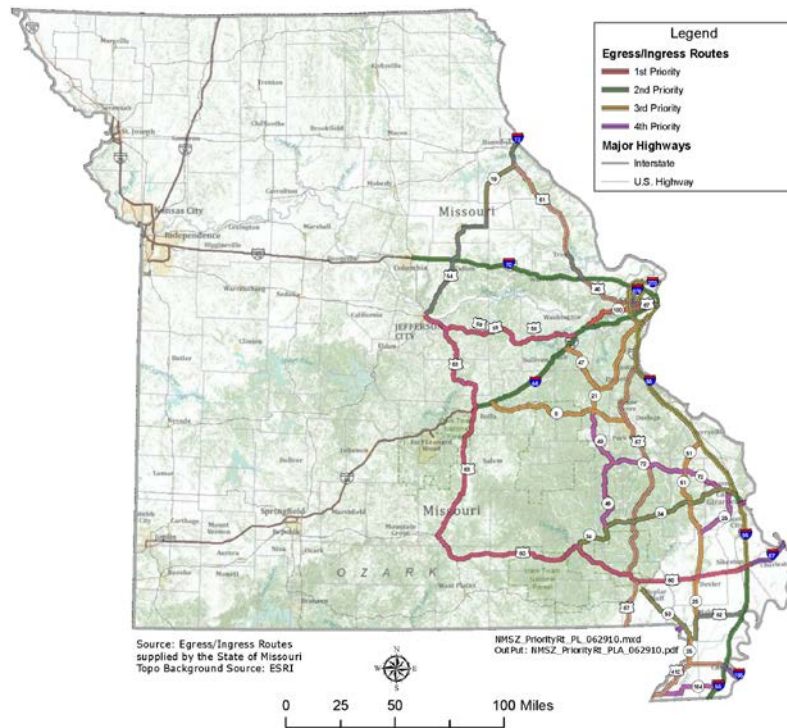


Figure C1-2 Road Bridges (FIGURE REDACTED)

Figure C1-3 Rail Passenger (FIGURE REDACTED)

Figure C1-4 Railroads Freight (FIGURE REDACTED)

Figure C1-5 Dams (FIGURE REDACTED)

Figure C1-6 Ports and Ferries (FIGURE REDACTED)

Figure C1-7 Air Ambulance Service (FIGURE REDACTED)

Figure C1-8 Aviation Staging Bases (FIGURE REDACTED)

1.1 Purpose

This ESF-1 appendix details the ESF's limitations, organization, and course of action to execute the roles and responsibilities assigned to the ESF during a NMSZ incident. This appendix identifies gaps, and aids the overall aim of Annex C and other annexes to enhance unity of effort and link existing plans.

Specifically, this appendix provides the ESF-1 Coordinator with the basis for evaluating and accepting or returning mission assignments and tasks received from other operations in response to an earthquake in the NMSZ. ESF-1 ensures that during a catastrophic earthquake, coordinated response and consideration are provided for safety of life and for accessibility, assessment, and restoration of critical lines of supply and transportation. To accomplish this, this annex will:

- Create a strategy for coordination in establishing lines of supply and transportation.
- Define the roles and responsibilities of coordinating and cooperating agencies.
- Describe the process for transition of supply/transportation status from accessible to rerouting/temporary to restoration of pre-earthquake capabilities.

- Describe coordinated assessment of the viability of roads, bridges, rail, airports, ports, and waterways.

Objective: Establish lines of supply and transportation

1.2 Considerations

The following considerations are specific to ESF-1. General considerations are included in Section 1.5 of the Base Plan.

- All types of public and private transportation infrastructure—including roads, bridges, waterways, rail lines, and airfields—will be severely affected.
- Serious damage to infrastructure such as pipelines, communication systems, and utilities is possible.
- Damage to infrastructure will cause cascading secondary impacts and threats such as fires, explosions, dam/levee failures, flooding, and chemical releases/hazardous materials incidents.
- It will be necessary and critical to ensure response operations are integrated and resources are used in the most effective manner possible.
- Initial situational awareness in the impacted areas will be difficult to obtain, as infrastructure and communications will be damaged by the earthquake.
- MoDOT Multimodal Division administers the State’s railroad program and the 19 railroads that operate within the State; this Division is responsible for public highway-railroad crossings and railroad infrastructure in conjunction with the Federal Railroad Administration.
- The Missouri State Highway Patrol (MSHP) Water Patrol Division, in conjunction with the U.S. Coast Guard (USCG), is responsible for monitoring the safety and security of ports and waterways along the Missouri and Mississippi Rivers.
- Bridges not seismically retrofitted are extremely vulnerable.
- Local resources will be overwhelmed immediately and state and federal resources will make every effort to provide additional life safety support as quickly as possible.
- Affected populations will be hampered in evacuation and rescue efforts.
- ESF-1 resources will be needed to:
 - Identify/assess damage locations
 - Re-route traffic
 - Establish temporary routes
 - Establish alternative transportation methods
- ESF-1 resources will need to coordinate especially with ESFs-3, -7, and -12; the U.S. Army Corps of Engineers (USACE); and all other ESFs to support response activities.
- State and local transportation agencies will be able to immediately initiate repairs following a disaster to “restore essential traffic, to minimize the extent of damage, or to protect the remaining

facilities.” Prior approval from the Federal Highway Administration (FHWA) is not required (FHWA Emergency Relief Manual).

- Functioning highway/bridge/roadway facilities will provide detours and serve as alternate routes for damaged transportation facilities.
- Some roadways will serve as temporary routes for non-motorized travel (foot, bicycle, horse).
- Closed highways may provide temporary helicopter landing and staging options.
- Damage assessment of transportation infrastructure and traffic conditions, including damage to the highway system, should include road information and displays.
- MoDOT will maintain status of all transportation damage repair projects, whether work is done by maintenance forces or by contract, and will ensure necessary documentation for later reimbursement.
- The removal of debris from roadway facilities following an earthquake may be managed by multiple programs and personnel available at various local, state, and federal agencies, as well as by volunteer organizations.
- Rail distribution of relief supplies to areas that may be inaccessible by road may be possible.
- Local, state, and federal agencies will be able to initiate repairs around damaged rail sections that can maintain the flow of goods, provide detours, and furnish alternate routes for other damaged transportation facilities.
- USCG will manage ports and waterways in conjunction with MSHP/Water Patrol Division.
- USCG Captain of the Port(s) (COTP) has lead responsibility for determining closing and/or re-opening/setting port readiness conditions of port facilities, and movement of vessels following an emergency affecting a port community.

1.3 Assumptions

The following assumptions are specific to ESF-1. General assumptions are included in Section 1.6 of the Base Plan.

- Large-scale evacuations, organized and self initiated, will occur—needing ingress and egress.
- Public and private transportation infrastructure—including roads, bridges, waterways, rail lines, and airfields—will be inaccessible.
- Population centers will be isolated due to damaged roads, bridges, waterways, rail lines, and airfields.
- The ports will provide acceptance of relief supplies.
- A comprehensive inventory of port reconstitution capability exists within private industry. The EF-1 Coordinator, USCG, and MSHP/Water Patrol Division will identify, coordinate, and deploy these systems.
- Several state departments have professional engineers or engineering technicians located throughout the State to assist with viability and evaluation of transportation infrastructure in the affected areas.
- Numerous private resources in the State are available to assist with engineering, transportation and construction activities.

- Most local public works departments will not have adequate resources to cope with this type of major disaster.
- The evaluation of highways, roads and bridges, dams, and other such structures will be conducted by MoDOT, local public works departments, Missouri Department of Natural Resources (MDNR), and air support.
- Abandoned or damaged vehicles will be removed from any roadway needed for ingress/egress into the affected area.
- Temporary flight restrictions will be coordinated with the Federal Aviation Administration (FAA) to apply to the air space over the affected area.
- Flight restrictions will facilitate and allow for aerial damage assessments and aerial delivery and response to life safety issues.
- Rail lines to generating plants, etc., will be disrupted, and the flow of coal and other resources will be interrupted.
- Existing ferries will be utilized to transport people and equipment to response areas and to individuals separated by bridge closings, etc.
- Public and private sectors will work together at high levels to restore infrastructure and systems.
- There will be high-level coordination of state agency plans, procedures, and preparations for route recovery and traffic regulation.
- Routing and directions for movement of incident victims out of an impacted area, as well as delivery of necessary personnel and medical supplies to local medical facilities and shelters, must be established.
- Establishment and management of roadblocks must be developed.
- Private contractors located throughout the State have pre-existing contracts with local, state, and federal agencies for use and operation (staffing) of earth-moving equipment for debris removal and temporary repairs.
- Private Railroad Entities will inspect rail track to verify that it is safe for use, and will provide advice to the Missouri State Emergency Management Agency (SEMA) on railroad technical transportation matters. These entities will also furnish information on railroad status and help coordinate regulated transportation resources and services, as needed.
- Ports will prioritize movement of goods and make every effort to continue operation.
- USCG will use the Homeport Alert Warning System, which includes phone calls, emails, and texts, to provide instructions to port users.

1.4 Limiting Factors

- Delay in field assessments from locals in the impacted area will lengthen the time to repair damages to the transportation infrastructure.
- Delay in aerial reconnaissance due to weather, air field inaccessibility, shortage of support staffing, etc., will lengthen the time to repair damages to the transportation infrastructure.
- Competition for resources and missions will severely impact all response agencies.

- Roads will require clearance/access to evaluate emergency priority routes prior to ground movement of responders and to life safety efforts.
- Priority routes are subject to change based on initial assessments following an earthquake event.
- Only a limited number of traffic officers will be available to direct traffic; officers will be deployed to major arterials, leaving few officers for more rural areas.
- Emergency services and responders will be hampered or unable to enter the affected area effectively or face inadequate ingress/egress.
- Not enough specialized equipment will be available for debris removal.
- Local construction contractors may not be available for hire.
- Structural damage to some fuel tanks will affect the amount of fuel available. Also, power outage may hinder ability to pump fuel.
- Time required to clear most major arterials in the affected region will hamper travel in the area.
- Clearing debris on roadways will be a substantial task: block walls, fencing, and collapsed buildings require months of prioritized debris removal.
- Many alternative routes will not be able to handle the size and weight of larger freighter haulers (trucks).
- Fire conditions that necessitate emergency response, and in some cases evacuation, will increase the need for roadways with already diminished capacity.
- Power outages will affect traffic signals and lead to gridlock or other problems.
- Many railroad bridges are susceptible to damage because of age, design, and construction.
- Hazardous materials in railroad tank cars, fuel releases, and fires could pose a substantial threat to transportation infrastructure, as well as other locations where hazardous materials are in transit, stored, or in pipelines.
- Lack of complex rail network in more rural, less densely populated counties will limit the amount of relief aid that can be distributed by rail.
- Public transit systems will be impacted.
- The Federal Railroad Administration (FRA) may stop rail traffic (49 U.S.C. § 20104); but only the Surface Transportation Board (STB) may redirect the movement of the traffic. In addition, FRA safety inspectors may immediately order locomotives out of service if they are not safe to operate without posing unnecessary danger of personal injury (e.g., non-compliance with FRA regulations), pending further inspection and a finding of compliance or repair of the defect (49 *United States Code* [U.S.C.] § 20702(b)).
- Security for rail lines and rail right-of-way will be limited post-event.
- Movement of cargo on the waterways must be prioritized due to limited capabilities—food, water, and emergency supplies will have priority.

2.0 Mission

The ESF-1 mission is to provide transportation and engineering-related support. Activities within the scope of this function include conducting post-incident assessments of transportation infrastructure; providing emergency repair of and temporary or alternate routes for damaged roads, bridges, waterways,

rail lines, and airfields to support life saving and life sustaining services; determining emergency routes and priorities in support of life saving and sustaining missions; and opening up a transportation network for distribution of emergency relief supplies to population centers.

MoDOT will automatically respond to an earthquake of 5.0 magnitude under state authorities. Missouri National Guard (MONG), USDOT, USACE, and the U.S. Geological Survey (USGS) will deploy in the event of a NMSZ earthquake, and will rapidly conduct response operations under the Stafford Act, and under USACE authorities. Operations will support damage mitigation, life saving operations, and provision of life sustaining relief to disaster survivors.

Specifically, in response to a catastrophic earthquake in the NMSZ, USACE will assess and repair flood protection, civil works, and navigation infrastructure; conduct missions in support of the Federal Emergency Management Agency (FEMA); support the USCG and U. S. Northern Command (NORTHCOM) Army North Joint Task Forces; and support others repairing critical infrastructure in order to save lives, protect property, and maintain or re-establish critical infrastructure.

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases. Table C1-2 lists the three (sub)phases of Phase 2:

Table C1-2 Response Phase Operational Periods

Response Phase	Operational Period
2a – Alert/Activation	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Employment/Sustained Response	E + 72 – E + 120 hrs +

The Response Phase and Operational Periods are designed to be flexible, as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

3.1.1 General Concepts

A 6.5 M_w earthquake along the NMSZ in Missouri will render many roads, bridges, rail lines, and airfields ineffective or significantly degraded. This will require coordination of numerous local, state, and federal resources to respond successfully.

Access to critical infrastructure and response to save lives are paramount in any catastrophic event. General priorities for an ESF-1 response to maintain, repair, or re-establish transportation capabilities are as follows:

- Establish lines of supply and transportation.
- Monitor and report the status of and damage to the transportation system and infrastructure.
- Identify temporary alternative routes and transportation solutions when primary systems are unavailable or overwhelmed (including roads, bridges, ports, and waterways).
- Implement appropriate air traffic and airspace management.
- Identify priority rail line routes.

- Coordinate issuance of regulatory waivers and exemptions.

3.1.2 Phased Response Concepts

3.1.2.1 Phase 2a: Immediate Response

Purpose of Phase

Gain situational awareness of transportation operations taking place at the local level, and bring these into a coordinated response effort establishing lines of supply and transportation.

End State of Phase

The end state of this phase is identified with conditions in place to open critical transportation infrastructure—implementation of a rapid/immediate response, with ground and air assessments of roads, rail, air, waterway, and port damages, and priorities based on speed and life safety.

Private Sector Mission-essential Tasks

Report any observable damage of critical transportation infrastructure to local authorities by any means available.

Local Mission-essential Tasks

1. Integrate transportation into the Local Incident Command.
2. Mobilize transportation/public works assets; perform missions as tasked by the local authority.
3. Prepare to attain the following response times for transportation response resources:
 - a. Local response time 0-2 hours
 - b. Intra-state regional response time 2-12 hours
 - c. State response time 12-24 hours
 - d. Inter-State response time 12-24 hours
 - e. Federal response time 24+ hours
4. Begin and continue evaluations of all critical transportation infrastructure including damaged roads, bridges, waterways, rail lines, and airfields.
5. Local authorities will initiate post-incident assessments of transportation infrastructure, and will provide emergency repair and temporary or alternate routes for damaged roads, bridges, waterways, rail lines, and airfields.
6. Gather essential elements of information:
 - a. Damaged/destroyed transportation corridors, especially along priority routes
 - b. Damaged transportation assets in the local jurisdiction
 - c. Status of damaged roads
 - d. Status of bridges
 - e. Status of rail lines
 - f. Status of airfields
 - g. Status of waterways and ports

Pass this information directly to the State Emergency Operation Center (SEOC) or to the State Area Coordination Center (SACC) to be forwarded to the SEOC. If this contact is unsuccessful, relay information through the regional MSHP.

7. Determine the status of equipment and resources—check the status of supplies and provide reports with projected needs for the next operational period to the SEOC or SACC, if activated, or to the MSHP.
8. Alert or activate off-duty and auxiliary personnel as required
9. Relay damage reports and advance warning of all potential problem areas to the SEOC or SACC, if activated.

State Mission-essential Tasks

Missouri Department of Transportation:

1. Establish communications.
2. Develop an ESF-1 information collection plan to gather essential elements of information, and provide as part of the overall information collection plan (ICP).
3. Work with local agencies in supporting on-scene management for a transportation response.
4. Evaluate status of all post-incident assessments of transportation infrastructure, including temporary or alternate routes for damaged roads, bridges, waterways, rail lines, and airfields to provide support for life saving and life sustaining services.
5. MoDOT will auto respond to an earthquake of 5.0 magnitude and deploy Post-incident Bridge Inspection Teams (PIBT), MSHP, air support, and MoDOT ground vehicles to begin system evaluations.
6. MoDOT, in coordination with other Missouri state agencies, will immediately divert all ground traffic from the west to north/south routes around the damage zone and across the Mississippi River.
7. Coordinate with other state agencies and local authorities to assist in identifying and restoring critical transportation routes and critical transportation infrastructure to facilitate emergency operations.
8. Determine emergency routes and priorities in support of life saving and sustaining missions, and open up a transportation network for distribution of emergency relief supplies to the population centers.
9. Ascertain immediate local status and response capabilities (personnel, equipment, materials, and supplies).
10. Support coordination of technical, administrative support, personnel, facilities, communications, and information.
11. Provide operational priorities to field teams, considering seasonal personnel flux.
12. Conduct assessment of regulated and non-regulated dams, levees, and navigable waterways.
13. Coordinate with local public works resources to prioritize activities and other functions in order to establish priority routes.
14. Determine resource requirements and evaluate requests for assistance from local agencies; via the SEOC Emergency Management Assistance Compact (EMAC) desk, arrange for applicable state resources, as well as requests for support via EMAC and requests for federal assistance.

15. Move mission-assigned strike teams and overhead personnel to rear staging areas, operational staging areas, established bases, or directly to the incidents as applicable.
16. Coordinate with ESF-7 to ensure logistical needs are included.
17. Coordinate with ESF-15 regarding public information associated with open transportation routes and other emergency information.
18. Coordinate with transportation departments responding from outside the State.
19. Send heavy machinery representatives to the SEOC or SACC, if activated, to establish ESF-1 and begin coordination with the local Incident Commander (IC).
20. Obtain information from local transportation/public works agencies or individual companies, and conduct reconnaissance to determine overall post-event transportation capabilities remaining operational within the affected areas.
 - a. Determine post-event response capability.
 - b. Determine status of priority routes.
 - c. Assign priorities to primary/priority roads.
 - d. Determine status of dams and levees, ports, and waterways.
 - e. Determine status of rail lines and air fields.
21. Coordinate inter-state and federal resources into local Incident Command structure.
22. Coordinate activities with other agencies and ESFs.
23. Initiate transportation waiver coordination.

Missouri State Highway Patrol:

1. Secure route, regulate traffic flow, and enforce safety standards for evacuation and re-entry into evacuated area.
2. Coordinate interstate highway movement on regulated routes with adjoining states.
3. Establish highway safety regulations consistent with location, type, and extent of emergency conditions.
4. Support MoDOT with traffic route re-establishment, and continue emergency traffic regulation and control procedures as required.

Missouri National Guard:

1. Assist in clearing debris and rubble from essential government and military facilities, roadways, and bridges; advise SEMA on use of military equipment and supplies to support these activities.
2. Provide technical and engineering assessments through the MONG Full Spectrum Integrated Vulnerability Assessment Team and Air National Guard Civil Engineering units.
3. Provide ground and air support.

Missouri Department of Conservation:

Assist with clearing debris and rubble from essential government facilities, roadways, and bridges.

Missouri Department of Corrections:

Assist with clearing debris and rubble from essential government facilities, roadways, and bridges.

Federal Mission-essential Tasks

United States Department of Transportation

1. Monitor and report status of and damage to the transportation system and infrastructure as a result of the incident, conducting post-incident assessments of public transportation infrastructure.
2. Identify temporary alternative transportation solutions that can be implemented by others where systems or infrastructure are damaged, unavailable, or overwhelmed.
3. Perform activities under the direct authority of DOT elements as these relate to aviation, maritime, surface, railroad, and pipeline transportation.
4. Coordinate restoration and recovery of the transportation systems and infrastructure, providing public works and engineering related support for the changing requirements of domestic incident management.
5. Assist federal, state, local, and private organizations with waivers and relief to federal statutes, as needed and appropriate, regarding all modes of transportation.
6. Receive Mission Assignments from FEMA.
7. Support emergency repair of transportation routes.
8. Provide technical assistance to include engineering expertise.
9. Send federal ESF-1 staff to the National Response Coordination Center (NRCC), Regional Response Coordination Center (RRCC), Joint Field Offices (JFO), and SEOC(s), as well as other facilities, as requested and appropriate.
10. Provide and receive reports and updates as required from various agencies (local, state, and federal) on:
 - a. Post-event response capability
 - b. Efforts to clear priority routes
 - c. Traffic re-routing
11. Identify communications requirements and capabilities.
12. Activate assets through the RRCC in advance of state requests if possible.
13. Prepare to deploy to the RRCC or the JFO as directed, and to be fully responsive under the principles of Unified Command (UC) as defined by the National Response Framework (NRF).
14. Coordinate federal, other state, and private resources through the Branch/JFO in consultation with other federal agencies, state agencies, and the private sector.

United States Coast Guard

1. Evaluate and respond to identified waterways and ports.
2. Provide subject matter expertise (SME).
3. Provide equipment and personnel as required.
4. The USCG COTP has lead responsibility for determining re-opening of port facilities and movement of vessels following an emergency affecting a port community.

- Using port decision criteria and considerations from the Area Maritime Security Plan (AMSP) as a starting point, the COTP will work with other members of the private sector and the port community to refine and apply these to the specific incident.

3.1.2.2 Phase 2b Deployment

Purpose of Phase

Conduct emergency transportation missions to minimize loss of life and damage to property, and to stabilize the incident.

End State of Phase

An organized emergency response has begun to open critical transportation infrastructure, based on ground and air assessments of roads, rail, air, waterway, and port damage.

All large-scale evacuations will be overseen by the Evacuation Management Team (EMT) from the SEOC. The EMT is a multidisciplinary team that can support evacuation efforts, make recommendations to the UC, and coordinate with local jurisdictions. The EMT will be actively engaged in assessing the impact to jurisdictions and developing a course of action for conducting evacuation operations. The composition of the EMT is listed in Table C1-3.

Table C1-3 Evacuation Management Team Composition

Agency Represented	ESF-#
Department of Public Safety	ESF-13
Public Information Officer (PIO)	ESF-15
State Emergency Management Agency	ESF-5
Department of Natural Resources	ESF-10
Missouri Department of Transportation	ESF-1
Voluntary Organizations Active in Disaster	ESF-6
Department of Social Services	ESF-6
Department of Health and Senior Services	ESF-8
Missouri State Highway Patrol	ESF-13
National Guard	N/A
Department of Mental Health	ESF-6

Localized evacuation will be the responsibility of the local jurisdiction. Once a regional evacuation has been implemented by the EMT, the overall concept of operations is outlined in the ESF-6 Appendix to this OPLAN. Throughout this process, the EMT and the local Emergency Management Directors (EMD) will coordinate efficient deployment of resources and utilization of available evacuee shelter capacity, and effectively address modifications to evacuation routes.

Private Sector Mission-essential Tasks

- Assess the need for additional assets and request them from the SEOC or SACC, if activated.
- Continue to provide situation updates and damage assessment data to the SEOC or SACC, if activated.
- Participate in a Business Emergency Operations Center (BEOC) with SEMA.

Local Mission-essential Tasks

1. Assess the need for additional assets and request them from the SEOC or SACC, if activated.
2. Calculate and convey all transportation resource shortfalls.
3. Continue to provide situation updates and damage assessment data to the SEOC or SACC, if activated.

State Mission-essential Tasks

Missouri Department of Transportation:

1. Obtain results of inspections of and assessment of damages to dams undertaken by MDNR Dam Inspectors (upon notification by MDNR [ESF-3]), as these damages impact roadway and other transportation systems.
2. Establish access to primary transportation and supply routes.
3. Establish traffic control for non-accessible roads, bridges, etc., and identify locations for alternate routes, temporary bridges, etc. Initiate re-routing plans.
4. Provide the Joint Information Center (JIC) with updated media briefings regarding master road lists and transportation information for ingress/egress.
5. Begin assimilating information for re-establishment of damaged or destroyed transportation facilities.
6. Determine what regulations require waiver based on situation.
7. Implement the Red/Green (post-incident inspection of open or closed bridges) system for bridges.
8. Implement detailed field inspections for confirmation of Red/Green status.
9. Establish communication with district offices, and ascertain the capabilities of Headquarters, MoDOT district offices, maintenance buildings, and field assets.
10. Identify needed resources; request and coordinate these with the Operations and Logistics Branch to activate the EMAC and Federal Mission Assignments system.

Federal Mission-essential Tasks

United States Department of Transportation

1. Monitor and report status of and damage to the transportation system and infrastructure as a result of the incident.
2. Identify temporary alternative transportation solutions that can be implemented by others when systems or infrastructure are damaged, unavailable, or overwhelmed.
3. Perform activities under the direct authority of U. S. DOT elements as these relate to aviation, maritime, surface, railroad, and pipeline transportation.
4. Coordinate restoration and recovery of the transportation systems and infrastructure.
5. Coordinate and support prevention, preparedness, response, recovery, and mitigation activities among transportation stakeholders within the authorities and resource limitations of ESF-1 agencies.
6. Assist federal, state, local, and private organizations with waivers and relief to federal statutes, as needed and appropriate, regarding all modes of transportation.

7. Deploy liaisons to the State, if not already done, to work with ESF-1.
8. Activate federal assets for ESF-1 as needed in coordination with the SEOC or SACC, if activated.
9. Call contractor personnel through national contracting vehicles to support the mission.
10. Execute emergency contract support for life-saving and life sustaining services.
11. Waive certain safety regulations outlined in various provisions of 49 U.S.C. concerning: airline regulations and hazardous materials.

United States Army Corp of Engineers

1. Evaluate and report status of federal dams and levees as these impact roadways and transportation routes.
2. Provide SME for transportation infrastructure repair.
3. Provide equipment and personnel as required.

United States Coast Guard

The COTP makes the final decision for planning and executing port re-opening priorities and procedures.

Federal Aviation Administration

1. Grant exemptions from FAA authority under regulations of 49 U.S.C. § 40109(b).
 - a. Exemptions may cover activities such as;
 - Transportation of otherwise prohibited substances to emergency locations
 - Passenger manifesting
 - Towing of devices or equipment by helicopters to address emergency situations
 - Removal of flight and duty time limitations to permit emergency evacuations by airline pilots
 - Use of non-certificated aircraft for transportation of people or cargo.

3.1.2.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

Continue to identify and deploy transportation assets to the affected area as more areas become accessible, with priority given to life safety, preservation of property, and stabilization of the incident.

End State of Phase

The end state of phase is identified by successful stabilization of the incident and transition of transportation oversight and control back to the local level and appropriate state and federal authority in preparation for long-term recovery.

Private Sector Mission-essential Tasks

Continue support/contract efforts.

Local Mission-essential Tasks

1. Participate in disaster response, damage assessment, and recovery missions.
2. Determine needs to maintain essential services within the jurisdiction.
3. Expedite review of waivers.

4. Continue assessments and communications of current and ongoing status.

State Mission-essential Tasks

Missouri Department of Transportation:

1. Continue to verify, analyze, and develop reports that provide current operating picture (COP) of the incident.
2. Assist with permitting requests, including waivers for transportation exceptions.
3. Prioritize essential known resources:
 - a. Fuel, food, basic needs, and boots on the ground
 - b. Private contractors
 - c. Heavy equipment for implementation of “go around” bridges to allow temporary access around damaged roadways, etc.
4. Identify temporary staff to reconstitute existing local staff.
5. Provide situational awareness and deployment requirements.
6. Post reports to the designated reporting system.
7. Monitor the status of active mission assignments related to response activities.
8. Gather appropriate documentation for fiscal closeout.
9. Transition from emergency, temporary, and alternate transportation routes to relocation, rebuilding, and construction.
10. Begin demobilization planning.

Federal Mission-essential Tasks

United States Department of Transportation

1. Monitor and report status of and damage to the transportation system and infrastructure as a result of the incident.
2. Identify temporary alternative transportation solutions that can be implemented by others when systems or infrastructure are damaged, unavailable, or overwhelmed.
3. Perform activities under the direct authority of DOT elements as these relate to aviation, maritime, surface, railroad, and pipeline transportation.
4. Coordinate restoration and recovery of transportation systems and infrastructure.
5. Coordinate and support prevention, preparedness, response, recovery, and mitigation activities among transportation stakeholders within the authorities and resource limitations of ESF-1 agencies.
6. Assist federal, state, local, private, and tribal organizations with waivers and relief to federal statutes, as needed and appropriate, regarding all modes of transportation.
7. Monitor the status of active mission assignments; continue to accept mission assignments based on capacity.

United States Department of Homeland Security

As necessary, issue waivers of the Merchant Marine Act of 1920 (the “Jones Act”)—the Maritime Administration (MARAD) assists DHS in determining whether such waivers are necessary, as well as the extent and duration of such waivers.

Federal Railroad Administration

As necessary, issue waivers of safety rules, regulations, or standards during an emergency situation or event per 49 U.S.C. § 20103(d).

Surface Transportation Board

As necessary, exempt persons, transactions, or services—either individually or as a class—from almost all parts of the statute that it administers for rail provisions, motor and water carrier provisions, and pipeline provisions.

4.0 Oversight, Coordination, and Communications

A list of resources available for “tasking” (state) or mission assignments (federal) will be maintained by the agencies comprising ESF-1.

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Public Works (transportation/highway dept.)
- Local Law Enforcement
- Local Incident Command

4.1.2 State

- Missouri Department of Transportation

4.1.3 Federal

- U.S. Department of Transportation

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Law Enforcement
- Local Public Works

4.2.2 State

- State Emergency Management Agency
- Missouri Department of Administration
- Missouri Department of Conservation
- Missouri Department of Corrections
- Missouri Department of Natural Resources
- Missouri Department of Public Safety

- Missouri National Guard
- Missouri State Highway Patrol/Water Patrol division
- Missouri Volunteer Organizations Active in Disaster

4.2.3 Federal

- Federal Emergency Management Agency
- United States Army Corp of Engineers
- United States Coast Guard
- Federal Aviation Administration
- Surface Transportation Board
- Federal Railroad Administration.
- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Energy
- Department of Homeland Security
- Department of Interior
- Department of Justice
- Department of State
- General Services Administration
- U. S. Postal Service

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The EMAC offers state-to-state assistance during a governor-declared state of emergency (receiving state). Assumedly, EMAC will be readily available during a NMSZ incident, and can be used to obtain needed resources quickly. The State of Missouri concept of operations is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

1. The Governor of Missouri declares a disaster.
2. SEMA opens an EMAC event in the EMAC Operations System.
3. Missouri requests assets based on mission assignment.
4. The assisting state details available assets and estimates costs, communicating this information to SEMA.
5. SEMA approves the resource and cost.

6. The resource from the assisting state mobilizes and deploys.

For resources not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

Table C1-4 lists resources that may be requested for utilization in Missouri from non-impacted states through the EMAC system by pre-incident agreement. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C1-4 Pre-scripted EMAC Requests

EMAC / REQ-A	EMAC Request	Providing State and Agency Point of Contact
	State Concrete Batch Plan	
	Transportation Public Information Officers	
	Transportation Infrastructure Aerial Assessment	
	Highway Bridge Inspectors	
	Highway Repair Crews	
	Highway Bridge Repair Crews	
	Traffic Signal Crews	
	Temporary Bridges	

5.2 Pre-scripted Requests for Federal Assistance

Table C1-5 lists resources that may be requested through the Federal Government via FEMA Mission Assignments. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C1-5 Pre-scripted Requests for Federal Assistance

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Commissioner	MoDOT		FAA Waiver for Flight Restrictions at Base of Ops		
	Commissioner	MoDOT		Heavy Equipment from USDA		
	Commissioner	MoDOT		Multi-State Transportation Waivers		
	Commissioner	MoDOT		Airport Assessment Team from USACE		

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Appendix C2 – ESF-2 Emergency Communications Joint Missouri & Region VII Response Operations Plan

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE
OPERATIONS PLAN**

**Annex C, Appendix C2
ESF-2 – Emergency Communications**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

The ESF-2 Appendix to the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Operations Plan (OPLAN) describes the concept of operations for joint local, state and federal emergency communications following a catastrophic earthquake in southeastern Missouri.

Under the State of Missouri Emergency Operations Plan (SEOP) Annex B, the Missouri State Highway Patrol (MSHP) and State Emergency Management Agency (SEMA) have the primary responsibility for ESF-2. The SEOP identifies the roles and responsibilities for conducting communications. This includes reliable and effective communication between personnel in the field and decision makers in the State Emergency Operations Center (SEOC). The SEOC's Communication Center serves as the central point for transmitting and receiving certain radio and wire traffic to and from federal, state, and local authorities and ensuring a rapid return of interoperable emergency communications conditions.

Under the National Response Framework (NRF), the Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA) and National Coordination Center (NCC) are co-primary agencies for ESF-2. NCC serves as the coordinator for ESF-2 functions. ESF-2 supports the restoration of the communications infrastructure, facilitates the recovery of systems and applications, and coordinates federal communications support to response efforts during incidents requiring a coordinated federal response. ESF-2 provides communications support to federal, state, and local governments when their systems have been impacted, and provides communications and information technology support to the Joint Field Office (JFO) and JFO field teams. With the rapid convergence of communications and information technology, the National Coordination Center (NCC), who has the primary responsibility for restoration of telecommunications in the incident area, and the National Cyber Security Division (NCSD), work closely to coordinate the ESF-2 response.

The *U.S. Department of Homeland Security, FEMA Region VII 2010 Emergency Communications Plan*, State of Missouri Annex offers a detailed description of integrated communications operations, outlines available resources and anticipated communications needs for response personnel. The Emergency Communications Plan, Missouri Annex forms the basis for joint interoperable communications including:

- Operability – The ability of emergency responders to establish and sustain communications in support of mission operations
- Interoperability – The ability of emergency responders to communicate among jurisdictions, disciplines, and levels of government, using a variety of frequency bands as needed and as authorized
- Continuity of communications – The ability of response agencies to maintain communications in the event of damage to or destruction of the primary infrastructure.

This Appendix utilizes the NMSZ model depicted in the Mid-America Earthquake (MAE) Center Phase II data. While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire State including the 47 counties recognized by the State as having a high potential to be negatively impacted by a seismic incident. This Plan also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties or the effects of aftershocks are provided unless noted.

According to the MAE Center, seven Missouri counties are expected to sustain the most significant impact, as classified by the model “a total loss” of telecommunications capability is expected. Losses in almost all resources and infrastructure can be assumed for localities within. These counties are listed in Table C2-1. An additional four counties will sustain significant, but not total losses. These losses will most likely restrict telecommunications to partial capacity.

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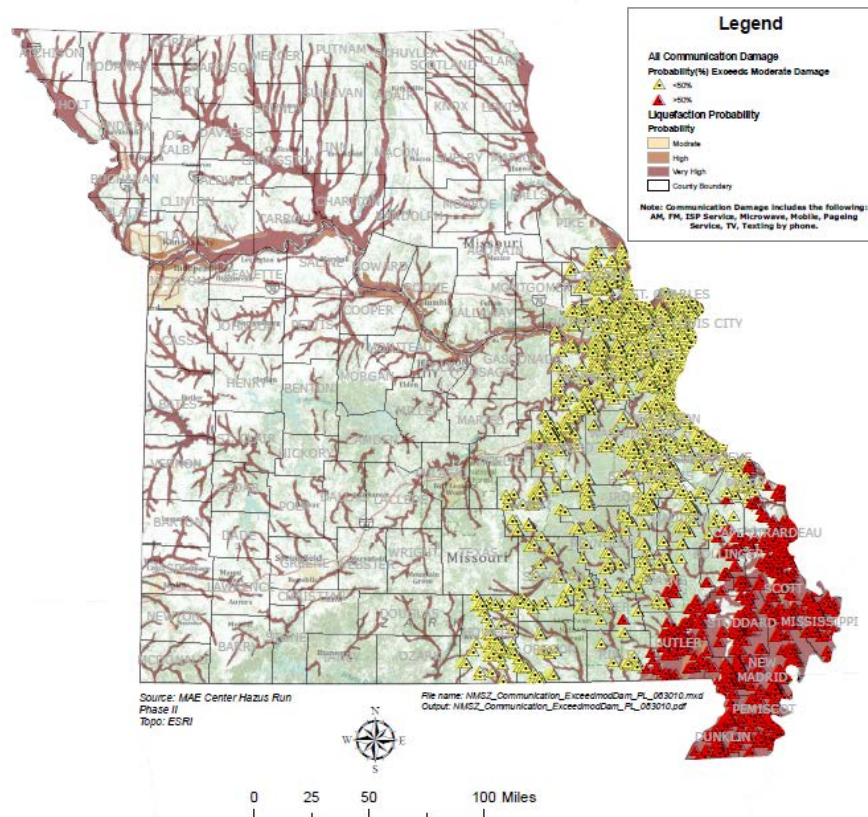
Appendix C2 – ESF-2 Emergency Communications Joint Missouri & Region VII Response Operations Plan

Table C2-1 Communications Loss Projections

“Total Loss” Counties	“Partial Capacity” Counties
Cape Girardeau	Bollinger
Dunklin	Butler
Mississippi	Perry
New Madrid	Wayne
Pemiscot	
Scott	
Stoddard	

The additional 11 counties accounted for within the MAE model will also sustain significant damage to infrastructure, however, it is anticipated that impact will be less severe than total loss counties. For a detailed geographic depiction of the critical communications infrastructure loss, refer to Figure C2-1 Infrastructure Impact.

Figure C2-1 Infrastructure Impact



There are approximately 6,000 locations susceptible to the impact of a NMSZ event. These locations include communication towers and fixed facilities. Of these facilities 1,160 reside in counties classified as ‘total loss’, meaning complete destruction. An additional 448 facilities reside in locations considered a ‘partial loss’, meaning significant impact can be expected. See table C2-2.

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Table C2-2 Impacted Infrastructure

County	Number of Communications Infrastructure Sites Impacted
Bollinger	80
Butler	192
Cape Girardeau	332
Carter	39
Dunklin	111
Iron	78
Jefferson	552
Madison	62
Mississippi	65
New Madrid	162
Pemiscot	128
Perry	112
Reynolds	64
Ripley	63
Scott	194
St. Charles	574
St. Francois	205
St. Louis	1738
St. Louis City	814
St. Genevieve	110
Stoddard	168
Wayne	64
Total	5907

Among the infrastructure severely impacted and of critical importance, will be the Public Safety Answering Points (PSAP). Within the 22 impacted counties, there are over 55 of these locations. Of the 55+ locations, it is assumed that eight to 13 of these locations will be completely inoperable. Complicating the matter further, five counties within the impacted area do not currently have 911 services. With the likely failure of the Public Switch Network (PSN), emergency communication to a significant amount of the population of the impacted area will be challenging. Table C2-3 provides an overview of the PSAPs within the impacted area; Figure C2-2 provides a geographic representation.

Table C2-3 PSAP Overview

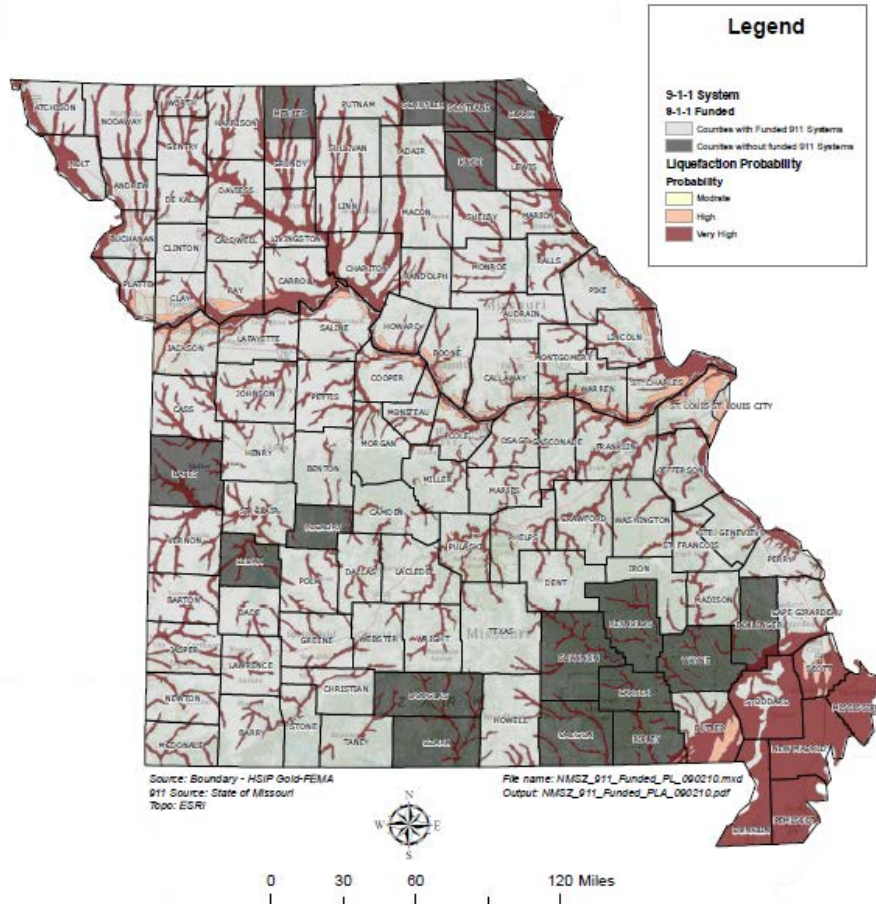
County	911 System	Number of PSAPs	Level of Service	Impact
Bollinger	No	Not Applicable	Not Applicable	Significant Loss
Butler	Yes	2	Enhanced	Significant Loss
Cape Girardeau	Yes	3	Enhanced	Total Loss
Carter	No	Not Applicable	Not Applicable	Some Loss
Dunklin	Yes	2	Enhanced	Total Loss
Iron	Yes	Not Reported	Not Reported	Some Loss
Jefferson	Yes	6	Enhanced	Some Loss
Madison	Yes	1	Enhanced	Some Loss
Mississippi	Yes	2	Enhanced	Total Loss
New Madrid	Yes	2	Enhanced	Total Loss
Pemiscot	Yes	1	Enhanced	Total Loss
Perry	Yes	2	Enhanced	Significant Loss
Reynolds	No	Not Applicable	Not Applicable	Some Loss

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Ripley	No	Not Applicable	Not Applicable	Some Loss
Scott	Yes	1	Enhanced	Total Loss
St. Charles	Yes	Not Reported	Enhanced	Some Loss
St. Francois	Yes	1	Enhanced	Some Loss
St. Louis	Yes	28	Enhanced	Some Loss
St. Louis City	Yes	2	Enhanced	Some Loss
St. Genevieve	Yes	1	Basic	Some Loss
Stoddard	Yes	1	Enhanced	Total Loss
Wayne	No	Not Applicable	Not Applicable	Significant Loss

Figure C2-2 PSAPs/ 911 Centers



To support the extensive communications needs of the State, both considering the restoration of infrastructure and communications operations, there will be extensive demands for trained personnel. The figure below (C2-4) does not include any personnel support for the staging areas, nor is it exhaustive to include all the required support at the local level (anticipating only one communications site per impacted county).

Table C2-4 Human Capital Requirements

Type	Number Required (120hr)
Disaster Emergency Communications Group Supervisor (DECGS)	2
Various Federal Task Force Leaders	14
Radio Operators (State/Local)	84
Amateur Radio Operators (State/Local)	62
Repair Technicians	5,000+

1.1 Purpose

The purpose of this appendix is to provide guidance regarding the functions of emergency communications related to the NMSZ beyond those contained in statutory plans and authorities. This document outlines the associated limitations, organization and course of action to execute the roles and responsibilities of ESF-2. More specifically, this annex intends to:

- Provide ESF-2 stakeholders with the basis for evaluating and accepting or redirecting mission assignments and tasks
- Provide operational concepts unique to a catastrophic earthquake event
- Assign responsibilities to state and federal agencies to meet the needs following a catastrophic earthquake

This appendix has one key objective:

Objective: Establish and maintain interoperable emergency communications

1.2 Considerations

- The extraordinary requirements of the NMSZ earthquake will significantly exceed the capability of most jurisdictions.
- Communications capabilities are vital to response operations and subject to widespread damage during a NMSZ event. Damaged communication capabilities would significantly limit effective response.
- ESF-2 must leverage all available resources from local, state, federal, private, and volunteer organizations in order to establish initial communications and enhance situational awareness.
- While FEMA, NCC, MSHP, and SEMA have lead roles in facilitating and optimizing use of ESF-2 resources, they will rely on support agencies and private sector partners for resources. A holistic, coordinated emergency management effort is critical.
- Federal agencies providing emergency management assistance under independent authorities to state and local governments, the private sector, and individuals, must coordinate communications system assessments, identification, and resolution of issues through ESF-2 to ensure a unified response.

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- State, local governments and the private sector have the lead roles in defining and addressing risk, response priorities and in leading the community emergency operations planning process.
- Federal ESF-2 agencies will coordinate emergency operations planning efforts with the appropriate stakeholders. Federal support will be tailored based on the type, extent, and duration of the incident and on availability of federal resources.
- The SEOC serves as the central coordination point for all essential SEMA staff, state agency and ESF representatives, technical advisors, private sector and volunteer organizations involved in disaster response activities. When activated, all resource requests will be coordinated through the SEOC to ensure a rapid and efficient response and to minimize the duplication of efforts. This facility has fully interoperable communications capabilities with all participating organizations, a complete voice and data network, an emergency power generator, 24-hour operational capability, and protection from the effects of most natural hazards. The SEOC has the capability to communicate via the PSN, cellular telephones, commercial satellites, high frequency (HF) radios, and very high frequency (VHF) radios.
- Local public safety may serve as the sole communications node for small towns and rural communities. When commercial infrastructure is damaged, a local radio system link to a central dispatch point may serve as a town or county's only connection to other communities, as well as to the SEOC.

1.3 Assumptions

- A NMSZ earthquake is a no-notice event.
- The Governor will declare a State of Emergency and request a Presidential Disaster Declaration.
- Due to impacted and interrupted infrastructure, state and local governments, departments, agencies, and offices must be prepared to operate independently for 96 hours.
- Communication resources from outside the impact area will be unable to enter the catastrophically impacted areas for some time.
- Communication resources will receive priority of entry to the catastrophically impacted areas to reestablish critical lines of transmission.
- Initially, all resources used in this plan will be in-state resources. Additional resources from outside the state will be requested immediately and as needed. These resources will be quantified through a rapid analysis and assessment.
- Alternative communications systems provide redundancy and ensure a degree of communications function following an earthquake.
- Satellite-based communications systems will be largely operational, but local and state emergency communication systems capacities for satellite-based communications will be limited.
- Cellular phone coverage will be unavailable initially within the impacted area, followed by sporadic coverage in certain geographic areas.
- Local and state communication systems will likely be degraded by downed towers. Operational capacities of microwave-supported radio systems will be overloaded with a high volume of first-response traffic or possibly misaligned due to ground movement.
- 911 PSAPS will be significantly degraded or nonfunctional, particularly if the telecommunications switching centers for PSAPS are damaged.

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Appendix C2 – ESF-2 Emergency Communications Joint Missouri & Region VII Response Operations Plan

- Power outages will likely occur for extended periods in certain areas, affecting the power supply to the communication systems that first responders rely on.
- Service disruption for certain enterprise nodes within the impacted area may affect a significant concentration of both voice and data systems, within and outside the state.
- If state and local communications systems are overtaxed during response, the federal government can support and augment communication activities. Supporting federal agencies can include the Department of Homeland Security, NCC and FEMA.
- Amateur Radio Operators may be used to provide communications support to state and local jurisdictions. Amateur Radio Operators may be affiliated with one or more of the following groups: Volunteer communication systems, including Military Auxiliary Radio System (MARS), Radio Amateur Civil Emergency Service (RACES), and Amateur Radio Emergency Service (ARES).
- The MSHP's Mobile Communications Command Vehicle (MCCV) will be deployed to augment resources.
- NCC will assist industry in restoring the public communications infrastructure.
- NCC will assist state and local governments with emergency communications, restoration of public safety communications systems and first responder networks.
- Tactical field communications for federal facilities and teams will be coordinated by the Communications Groups Supervisor, Operations Section and will be addressed in the ESF-5 Appendix of this plan.

1.4 Limiting Factors

- Local and state capabilities will be quickly overwhelmed. State resources will be deployed. FEMA/NCC resources will likely be requested by all states affected by the earthquake, shortages may exist.
- In the event of an earthquake of 6.5 magnitude or greater, the Public Switch Telephone Network (PSTN) will be disrupted. Thus, satellite and radio systems will provide most if not all emergency communications capabilities for an undefined period of time.
- If any landline-based communication systems remain functional post-earthquake, communications over these systems will be sporadic due to physical damage. It is likely that public agency, private sector and citizens will overload remaining infrastructure. Physical damage, in addition to user overload, will restrict overall emergency communications capability.
- Cellular phones systems coverage will be significantly affected. Because all cellular phone systems services are owned and operated by the private sector servicing public agencies, the private sector, and the general population, the services will be severely user-overloaded, thereby restricting service availability in areas where functionality exists.
- Mutual aid, federal, and other outside assistance and resources will take time to mobilize and damage to main transportation routes will impact response time, delay repairs, and present problems in transporting replacement or repair parts and personnel.
- Shortage of telecommunications technicians will delay the restoration of damaged equipment and inhibit the ability to resolve radio frequency conflicts and program radios for responders from out-of-state.

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Appendix C2 – ESF-2 Emergency Communications Joint Missouri & Region VII Response Operations Plan

- State and local agencies maintain a limited amount of communication equipment; there is not sufficient capacity to provide adequate communications capabilities for additional local, state, and federal responders.
- State and local agencies utilize a variety of conventional radio systems, including low-band very high frequency (VHF), hi-band VHF, ultra high frequency (UHF), and trunked 800-megahertz (MHz) systems in a few metropolitan areas. These disparate systems will make interoperability among response partners challenging.
- Emergency Management Assistance Compact (EMAC) or federal response teams will require forward logistical support that may not be established for 96 hours or more. Impacted communications facilities dependent on regular fuel supplies due to extended power outages will be constrained.
- The state has limited back-up generator resources. A lack of power could affect the viability of key communications systems if the primary electrical supply is disrupted at key operations centers or tower locations.
- Significant impact to the PSAPs in the state will hinder the abilities of the citizenry to contact emergency services.

2.0 Mission

The mission of ESF-2, Communications at all levels, is to provide voice and data services to enable all elements of the response effort to communicate with one another by, to the extent possible considering the resources available:

State

- Identifying communications capabilities required for use by emergency responders at key command and control nodes and in the incident area following a NMSZ earthquake.
- Identifying and deploying portable communications resources available temporarily from intra-state partners, inter-state partners and federal agencies to meet state and local requirements.
- Support response activities by operating communication equipment and communicating information between facilities and responders.

Federal

- Identify and re-establish the nationally critical communications assets, networks and systems located in or passing through affected area.
- Implement mission assignments to deploy federal communications resources when requested by the state.

3.0 Execution

Region VII response phase methodology has been designed to meet the first five days (120 hours) of operations. The current methodology is:

Table C2-5 Response Phase Operational Periods

Response Phase	Operational Period
2a – Immediate Response	E + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Employment/ Sustained Response	E + 72 – E + 120 hrs +

The Response Phase and Operational Periods are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.2 Concept of Operations

3.2.1 General Concepts

Throughout this Appendix the specific functions of local, state and federal ESF-2 response agencies are detailed. Due to the differences between jurisdictional planning, responsibilities for these tasks differ depending upon the level of governance.

The functions discussed below concern extraordinary situations that may exhaust all available local resources and require assistance from multiple jurisdictions and other external sources. Interoperable emergency communications are vital to enable other ESFs to execute their objectives. Conveying coordination and control and creating a common operating picture rely on the communications network established post incident. The following general concept of operations outlines the communication function and needs:

1. The NCC and FEMA will coordinate and assist the communication sector (telecommunications and information technology industries) within the affected area to rapidly reconstitute critical communications services.
 - a. GSA provides personnel to support regional requests for human capital, as resources are available.
 - b. The FEMA Disaster Emergency Communications (DEC) representative will initially occupy the ESF-2 position in the RRCC for FEMA Region VII and subsequently deploy to the SEOC.
2. Priority service programs will be utilized to assist first responders, emergency managers and critical decision makers.

Figure C2-3 Integrated-Immediate Communications Matrix

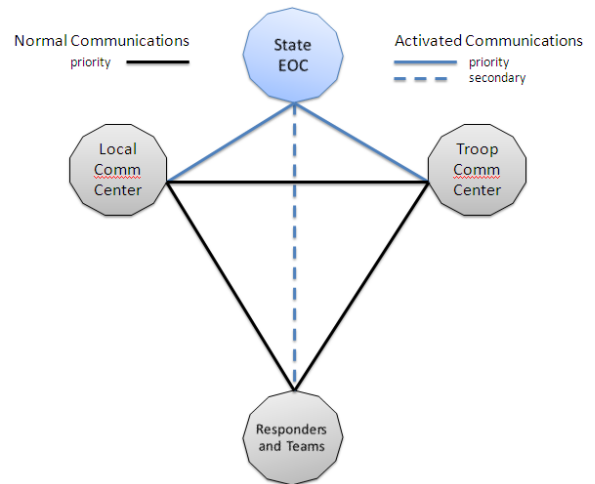
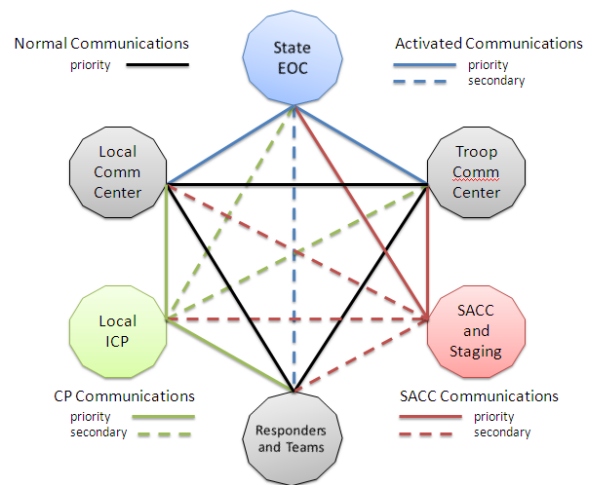


Figure C2-4 Integrated-Activated Communications Matrix



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Appendix C2 – ESF-2 Emergency Communications Joint Missouri & Region VII Response Operations Plan

- a. Government Emergency Telecommunications Service
 - b. Wireless Priority Service
 - c. Telecommunications Service Priority, to include PSAPS
3. Federal ESF-2 agencies and organizations coordinate communications infrastructure restoration in coordination with Industry Service Providers.
4. Federal ESF-2 liaison coordinates with other components of the Operations Section and other ESFs to ensure industry Essential Service Providers have the guidance, access, security and fuel required to restore communications.
5. The NCC Federal ESF-2 liaison coordinates the restoration of public/commercial communications systems and first responder networks.
6. The Federal Communications Commission (FCC) will provide spectrum management and frequency allocation for the entities it regulates.
7. The National Telecommunications and Information Administration (NTIA) will provide federal spectrum management interoperability support.
8. The JFO, Operations Section, DEC, and ESF-5 provide the following resources and actions in conjunction with ESF-2:
 - a. Provides tactical communications support to federal, state, tribal and local response operations.
 - b. Coordinates with federal agencies providing communications support to response operations.
9. In most situations responders will pass information forward directly to the SEOC, unless unable to contact or instructed to contact the State Area Coordination Center (SACC), if activated, or Regional Highway Patrol Office. A SACC may be established for Regions C and E.
10. The MSHP will provide personnel to staff the communications unit leader positions in each of these area coordination center structures. The regional communications point of contact may be established.
11. The Communications Matrix in Figure C2-3 depicts the immediate post-impact communication layers. Local communication centers will work with Troop communication to coordinate response among local responders. The Communications Matrix in Figure C2-4 depicts the layers of coordination anticipated in a NMSZ event, such as that outlined within this document. The solid lines represent ‘priority’ communications channels. The dashed lines represent ‘secondary’ communications or communications channels that may be activated ‘as needed’. The lines are color coded per entity and are categorized as ‘normal’ communications or ‘activated’ communications channels resulting from an emergency situation. The links between the various entities may currently exist or may have to be established in response to an emergency situation. The fundamental concept of operation follows:
 - a. Normal Instance:
 - i. The nine MSHP troop headquarters maintain ‘priority’ contact with their local public safety communications centers within their troop area. The MSHP also maintains ‘priority’ contact with Patrol responders and possibly other agency responders on assigned or interoperable frequencies during normal operations.
 - b. Activated Instance:

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- i. The SEOC will establish ‘priority’ contact with MSHP facilities via Patrol presence in the SEOC or through the MSHP communications facility at SEMA. The SEOC will also establish ‘priority’ contact with SACCs, if activated, and LSAs (Logistical Staging Area) if established and with local emergency operation centers (LEOC) if possible.
- ii. The LEOC/local communications center will establish ‘priority’ contact with the local ICP (Incident Command Post) and/or the local responders on assigned or interoperable frequencies during activation.
- iii. ‘Secondary’ contact channels may be established between entities as necessary to help facilitate specific activities.

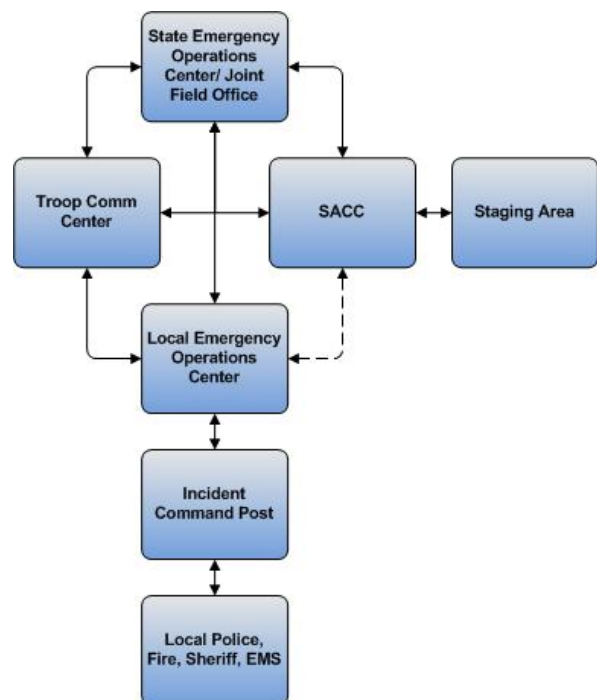
Refer to Operational Tool 6.2 for details regarding priorities, frequencies and methods of communications between the entities.

12. State staging areas will be established for incoming assets according to the ESF-7 Appendix. Staging Area Managers will be assigned. Responding units should have the address and initial contact frequency of their staging area prior to deployment.
13. Responding units will report by radio to the MSHP communications unit established by the ESF-7 Staging Area Manager. MSHP will support ESF-7 with communications hardware and personnel, to the extent possible. The initial report should contain:
 - a. The unit identifier
 - b. The unit discipline
 - c. The unit capability (heavy equipment, search and rescue, medical team, etc. etc.)
 - d. Communications capability.

14. When the unit is assigned a mission, they will be given instructions to contact a LNCS or incident command upon arrival into the area of operation.

15. The overarching process flow for communication operations is depicted in the Communication Operations Structure located in Figure C2-5. In transit responders may communicate with Troop and local communication centers on MTAC (154.680). Once assigned, responders communicate with the Incident Command Post (ICP) to which they are assigned. The ICP normally communicated to the local Communication Center. The Local Communication Center normally communicated to the SEOC or the Regional Troop Communication Center and may coordinate resource deployment with the SACC, if activated. The Troop communication Centers communicates to the

Figure C2-5 Communications Operating Structure



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Appendix C2 – ESF-2 Emergency Communications Joint Missouri & Region VII Response Operations Plan

SEOC and coordinate with the SACC. The SACC communicates to the SEOC and coordinated with Troop Communication Centers. Staging areas communicate with the SACC, if established.

16. Whenever possible, communications between the SEOC and local EOCs are established via telephone, fax and internet.
17. Volunteer agencies such as the American Red Cross, Salvation Army and the Civil Air Patrol normally provide their own communications equipment. Interoperability with the SEOC will be coordinated with the SEOC ESF-2 chair. Members of volunteer agencies should possess official government-issued identification such as a valid driver's license or passport and their NGO photo ID card if one has been issued.
18. Amateur radio resources including ARES, RACES, and MARS are vital redundant communications resources. The SEMA Communications Officer will coordinate their activities and communications. Radio Amateurs should possess official government-issued identification such as a valid driver's license or passport and their NGO photo ID card if one has been issued. Volunteers may be employed as back-up communications alternatives in the event of primary communication system interruptions or failures or to supplement existing communications capabilities during a time of disaster.
19. The MSHP Radio System is designated the primary SEOC radio communications support network. The radio systems of Missouri Department of Transportation (MoDOT), Missouri Department of Conservation (MDC), and the Missouri State Highway Patrol (MSHP) are designated as alternate backup radio communications systems.
 - a. The following key communications systems in the State of Missouri are used for daily operations and will be used to support response operations:
 - i. MSHP operates and maintains a 60-site, VHF low-band, directed-net radio system. High powered transmitters at each of the nine troop headquarters areas provide statewide coverage for MSHP operations and connectivity to local law enforcement agencies.
 - ii. MoDOT operates and maintains a 43-site, analog VHF Hi-band (narrowband compliant), repeated radio system that provides 90% statewide coverage and primary communications capability throughout ten MoDOT districts. MoDOT has approximately 5,000 subscriber units on this system to support their operations.
 - iii. The MDC operates and maintains a VHF Hi-band mobile-repeated radio system that provides statewide radio coverage in support of their operations. The MDV maintains 1,500 subscriber units operating on this conventional radio system
 - b. The major population centers in the State employ the following radio systems for emergency response and recovery missions within their areas of responsibility:
 - i. Kansas City, MO operates a citywide Motorola Digital Trunk System trunked 800 MHz system.
 - ii. St. Louis, MO operates and maintains a Motorola SmartNet trunked 800 MHz system.
 - iii. St. Louis County, MO operates a conventional VHF radio system that is shared among several entities in the county.

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- iv. In addition to the major systems detailed above, there are numerous VHF, UHF, and 700/800 MHz radio systems in use by local public safety agencies throughout the State.
 - c. The MONG stands ready to assist the State with disaster response and recovery missions. MONG support units use their internal communications resources to communicate with their forces, and can communicate with State agencies using VHF interoperability frequencies, PSTN, and cellular telephones.
- 20. MoDOT may employ a variety of notification systems to provide current information about roadway and weather conditions, road closures, suggested routes of travel, aid stations, and refueling points during evacuation. Coordination of messaging intended for the general public will occur in conjunction with ESF-15 and the SEOC. These systems include:
 - a. Changeable Message Signs (CMS) – MoDOT maintains over 175 fixed and mobile devices that can be used to deliver current information and emergency messages to commuters.
 - b. “511” Traveler Information System – MoDOT uses this voice-activated information service that can be accessed from cellular or landline telephones to provide travelers with a single number to obtain travel-related information.
 - c. 888-ASK-MoDOT – MoDOT maintains a toll free information line providing travelers with necessary traffic- related information throughout the State.
- 21. Primary communications for local EMS providers, hospitals, and the DHSS include PSTN, local VHF, local UHF, and local 800 MHz LMR systems. Cellular telephones, Hospital Emergency Administrative Radio (HEAR), and amateur radio resources provided by ARES and RACES volunteers have been identified as alternate or back-up communications resources that will be used in the event of a primary system failure.
- 22. The DHSS uses the Internet-based EMS system to maintain awareness of evolving situations at hospitals and health care facilities in the Missouri. The Health Alert Network (HAN) is another messaging tool that is used to notify medical care professionals in Missouri of major public health events and activities.
- 23. A detailed listing of communication systems for state and volunteer agencies is outlined in Annex B, Appendix 1 of the SEOP.

3.2.2 Phased Response Concepts

3.2.2.1 Phase 2a, Immediate Response

Purpose of Phase

The purpose of this phase is to activate the appropriate decision making centers in the affected area and throughout the state. The SEOC and FEMA’s RRCC will activate to provide an effective and coordinated support to emergency response communications and activate ESF-2 stakeholders. Initial damage assessment of emergency communication systems and infrastructure will commence.

End State of Phase

The end state of this phase is activation of LEOC and initiation of procurement of communications assets to facilitate widespread communication capabilities. Staging areas will be identified and assets and resources will begin deployment to the affected areas. Initial damage assessment will flow into the SEOC. The SEOC will act as the clearinghouse for all emergency communications information. The SEOC will communicate effectively with FEMA’s RRCC.

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Local Mission-essential Tasks

1. Activate LEOC and Emergency Tactical Interoperable Communications Plan (TICP).
2. Support local emergency responder communications in the field, as able.
3. Establish a central point of contact for radio communications with the SEOC.
 - a. Primary communications:
 - i. Whenever possible, communications between the SEOC and the local EOCs are established via telephone, fax and internet.
 - b. Alternate communications:
 - i. Law enforcement Point-to-Point channel. Local law enforcement agencies routinely contact their regional MSHP troop headquarters on the Point-to-Point frequency 155.370 MHz. MSHP will conduct a roll call of local law enforcement agencies on this channel in response to a disaster. Local law enforcement agencies may use this channel to contact the SEOC by working through an MSHP troop headquarters or by relaying through multiple local agencies.
 - c. Contingency communications:
 - i. Fixed, portable and mobile satellite phones
 - d. Emergency communications:
 - i. Local Amateur (Ham) Radio operators may be tasked to contact the SEOC on pre-established traffic nets and frequencies. The Missouri Emergency Services Net is the primary statewide amateur radio HF emergency net in Missouri. The net operates on a frequency of 3.963 MHz, lower sideband. The SEMA communications officer serves as the SEOC coordinator for amateur radio and MARS activities.
 - ii. Operation SECURE net. Local agencies licensed for operation on this band may contact the SEOC directly on the assigned frequencies.
 - iii. Auxiliary communications services such as REACT might be able to provide impromptu communications to a surrounding venue which could then relay information to and from the SEOC.
 - iv. Employ MSHP local zone car to provide initial damage and capability reports to SEOC through MSHP troop headquarters.
 - v. Use a ‘runner’ to take initial report to the nearest operating local communications point of contact.
4. Assess local damage to emergency communications systems including loss of communications and timeframes to restore emergency communications.
 - a. Each jurisdiction and their respective hospitals, fire, EMS and law enforcement departments are responsible for reporting their status both horizontally and vertically.
5. Disseminate damage assessment reports to SEOC.
6. Prepare list of critical resources needed to restore emergency communications.
7. Establish a local communication center which will serve the primary purpose of transmitting initial status reports from local governmental units to the Troop HQ. This will be done via the Point to Point frequency (155.370) or auxiliary communications services, as necessary.

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State Mission-essential Tasks

Missouri State Highway Patrol

1. Establish the extent of damage to the radio and information systems located at Troop E, Poplar Bluff and MSHP Troop C, Weldon Spring.
 - a. Determine whether MSHP Troop E and Troop C will be able to serve as the regional point of contact.
 1. Alternate regional communications point of contact for MSHP Troop E is Troop G, Willow Springs.
 2. Alternate regional communications point of contact for MSHP Troop C is Troop I, Rolla.
2. Troops will:
 - a. Establish Radio coordination with local jurisdictions.
 - b. Establish contact with SEOC (initially via MSHP Troop F, Jefferson City.)
 - c. Collect damage assessment reports from field MSHP Troopers.
 - d. Collect damage assessment reports as well as capability estimates from local jurisdictions.
 - e. Forward damage assessment reports to the SEOC based on the needed essential elements of information. Reference Annex B of the SEOP for detailed description of task.

State Emergency Management Agency

1. Activate the SEOC and establish communications with FEMA.
2. Serve as the collection point for rapid needs assessment information for communications capabilities.
 - a. Focused assessment should occur on both PSAPs and the PSTN.
 - b. Detailed information on power outage should be obtained from ESF-12.
3. Staff the SEMA Control Room in accordance with procedures outlined in SEOP Appendix 1 to the Base Plan.
4. Ensure that volunteer agencies that operate communications positions at the SEOC provide staffing and maintenance of their own positions.
5. Dispatch the Area Coordinator vehicles as desired or necessary to a local impact area to establish satellite phone connectivity to the SEOC and radio communications with a local communications point of contact on MTAC or VTAC channels, law enforcement or fire channels or an MSHP facility/vehicle.
6. Activate call-up plans as outlined in Annex A, Direction and Control of the SEOP. Activate personnel necessary to meet communications needs.
7. Maintain records and report on the communications systems status to the SEOC staff
8. Make necessary repairs or switch to alternate systems if disruptions occur.
9. Initiate requests for support for identified repairs and reconstruction of the systems, the deployment of response resources through mutual aid, assistance from MONG, or by requesting federal support.

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Amateur Radio

1. Activate resources, assess needs, and establish points-of-contact.
2. Coordinate with the SEOC.
3. Assess impact to available resources.

Federal Mission-essential Tasks

Federal Emergency Management Agency

1. Activate RRCC and establish contact with SEOC.
2. Activation of ESF-2 will be a coordinated effort involving multiple agencies. FEMA will rapidly activate and deploy the DEC to the ESF-2 position in the RRCC. The DEC will determine staffing requirements and draft mission assignments for ESF-2 stakeholders.
 - a. Immediate assistance may be available utilizing NCC
 - b. It may be up to 48 hours before personnel support is available from FEMA HQ
3. FEMA, the NCC, and Office of Emergency Communications (OEC) will utilize the FEMA National Radio System (FNARS) and/or the Shared Resources (SHARES) High Frequency Radio Program in anticipation of the commercial communication outages.
4. FEMA, NCC, and OEC will work to provide guidance for restoration of systems and will work with the FCC to manage Federal frequency usage. FEMA will focus on mission assigning both the FCC and NTIA to provide spectrum and commercial coordination.
5. FEMA DEC will request assistance from other Regions and Disaster Assistance Employee cadre, as needed, to meet the needs of the incident.

National Coordinated System

1. NCC and FEMA will work to provide guidance for restoration of systems as well as managing Federal frequency usage and developing comprehensive frequency management plan for emergency response communications.
2. The DECGS will coordinate through the Operations Section Chief to NTIA and FCC to resolve frequency usage issues and provide analysis of restoration requirements.

General Services Administration

1. Activate and deploy personnel and resources as mission assignments dictate.

USDA – Forest Service

1. Activate forest service National Fire Incident Cache, as requested.

Department of Defense

1. Provide support as requested

Federal Communications Commission

1. Provide support as requested
2. Develop comprehensive frequency management plan for emergency response communications.

National Telecommunication and Information Administration

1. Provide support as requested

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2. Develop comprehensive frequency management plan for emergency response communications

3.2.2.2 Phase 2b, Deployment

Purpose of Phase

The purpose of this phase is to continue to identify and deploy resources to the affected areas as more areas become accessible to assist emergency response operations. Continue to assess damage to emergency communications and start to return emergency communication systems to operating conditions.

End State of Phase

The desired end state of this phase includes properly deployed communications assets and resources and continued response as needed to fulfill communications requirements among emergency responders and affected populations.

Local Mission-essential Tasks

1. Continue to assess critical emergency communication systems.
2. Work with state agencies along with private sector partners to establish, stabilize, or restore emergency communications.
3. Continue to provide situation updates and damage assessment data to SEOC or the SACC, if activated.
4. Assess the need for additional assets and request resources. Those that cannot be obtained locally will need to be requested from the SEOC or the SACC, if activated.
5. Coordinate primary communications operations with arriving responders.

State Mission-essential Tasks

Missouri State Highway Patrol

1. Continue to verify, analyze, and develop reports that provide a common operating picture for the incident, include assessment of any cascading events.
2. Provide situational awareness and deployment requirements for emergency communications teams.
3. Prioritize key locations and activities that need emergency communications operations.
4. Continue to task regional and state assets to support operations in the affected area
5. Continue to establish, stabilize or restore primary communications.
6. Continue to communicate throughout response community.
7. Deploy mobile assets, as appropriate (MCV and other available resources).
8. Consolidate damage assessment reporting; provide regular briefings to senior officials.

State Emergency Management Agency

1. Deploy mobile assets, as appropriate (MCV and other available resources).
2. The SEMA communications officer will activate amateur radio and/or MARS resources for duty at the SEOC and at local areas of greatest need (if available).
3. The ESF-2 will prioritize restoration activities and brief senior officials.

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4. The ESF-2 will assess continued operations and project longer term resources needs (i.e., fuel, generators, etc.)
5. Coordinate with FEMA and NCC for the restoration of services and the reestablishment of critical lines of communication.

Amateur Radio

1. Activate resources, in conjunction with the direction provided by the SEMA communications officer.
2. Attempt to initiate contact with the impacted area.
3. Assess available resources; provide regular briefings to SEOC ESF-2, Communications.
4. Initiate operational periods for ongoing response resources.

Federal Mission-essential Tasks

Federal Emergency Management Agency

1. Support the establishment and maintenance of tactical communications for federal response activities.
2. Request and provide guidance for resources with the coordination of the Operations Section Chief and communications industry.
3. Ensure industry Essential Service Providers, to include PSAPs, have access, security, guidance and fuel required to restore the communications infrastructure.
4. Federal ESF-2 will coordinate federal and private-sector joint response operations.
5. Deploy ESF-2 representatives to support the communication sector damage assessments and initiate reestablishment of essential nodes. Guide prioritization of restoration activities.
6. Utilize the *National Interoperability Field Operations Guide*
7. Support state and local communications requests, to include responder communications and staging area operations.
8. Assist state agencies with the identification and prioritization of communications requirements and available resources.
9. Deploy federal communications (voice, data, and video) resources to support emergency operations based on identified priorities.
10. Provide credentials for commercial vendors and federal communications resources.
11. Federal ESF-2 will expedite restoration of commercial services; and temporarily restore state and local communications capabilities until commercial services are restored.
12. Determine immediate and critical communications gaps and deploy necessary communications equipment.
13. Execute commercial contracts for communications equipment and services.
14. Develop and distribute a frequency management plan.

General Services Administration

1. Provide support as requested to coordinate NCC response operations within the impact area.

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2. Provide guidance for restoration of essential systems.

USDA – Forest Service

1. Activate and deploy the forest service National Fire Incident Cache, as requested.

Department of Defense

1. Provide support as requested

Federal Communications Commission

1. Provide support as requested

National Telecommunication and Information Administration

1. Provide support as requested
2. Manage Federal frequency usage.

3.2.2.3 Phase 2c, *Employment/ Sustained Response*

Purpose of Phase

The purpose of this phase is to continue to identify and deploy assets to the affected area as more areas become accessible and to maintain the emergency communications infrastructure.

End State of Phase

The desired end state of this phase includes continued deployment and maintenance of communications assets and resources and established viable emergency voice communications within the affected area.

Local Mission-essential Tasks

1. Continue to assess damage and report those damages up to the SEOC or SACC, if activated.
2. Continue to assess needs and make request to the SEOC or SACC, if activated.
3. Continue to stabilize or restore emergency communications.

State Mission-essential Tasks

Missouri State Highway Patrol

1. Continue to monitor and assess the situation and support local jurisdictions in the stabilization and restoration of emergency communications.
2. Maintain Regional Communications Point of Contact, ensure coordinated communications.
3. Provide reports and information to senior leadership on restoration activities as well as ongoing damage assessment, as requested.

State Emergency Management Agency

1. Coordinate ongoing Emergency Communications.
2. Relay traffic as appropriate.
3. Coordinate with FEMA/ESF-2 on the restoration of services within the impacted area.
4. Ensure mobile assets area deployed and functioning for communications redundancy.
5. Coordinate continued amateur radio operations within response operations.
6. Provide communication for response agencies in the field through available resources.

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Amateur Radio

1. Sustain response operations, support mission assignments.

Federal Mission-essential Tasks

Federal Emergency Management Agency

1. Working with NCC, verify, analyze, and develop reports that provide current operating picture for commercial and public safety communications networks.
2. Assess anticipated and actual damage in the incident area in conjunction with Federal and industry partners. Develop a comprehensive understanding of critical infrastructure impacted by the incident.
3. NCC coordination with industry to identify actual and planned actions of commercial communications industry for recovery and reconstruction of their facilities and infrastructure.
4. Continue to survey the status of the communications infrastructure and assess the extent of damage within the incident area.
5. Assess communications capabilities for each critical mission area to determine requirements.
6. Identify all radio systems that are online or offline, and resolve radio frequency conflicts and interference, working with FCC.
7. Provide temporary communications for situational awareness when commercial and public safety wired and wireless networks are damaged or congested.
8. Collect, prioritize, and manage requests for temporary emergency communications capability.
9. Deploy communications resources from federal caches and commercial sources to meet situational awareness, command and control, and highest priority critical mission requirements.
10. Deploy communications interoperability solutions and integrate disparate networks as required.
11. Working with NCC monitor the status of commercial communication systems availability
12. Coordinate with other ESFs for fuel, power, and transportation in support of critical communications facilities.

General Services Administration

1. Sustain response operations.

USDA – Forest Service

1. Activate and deploy forest service National Fire Incident Cache, as requested.

Department of Defense

1. Provide support as requested

Federal Communications Commission

1. Identify spectrum congestion and requirements for new frequencies, and issue Special Temporary Authority (STA).
2. Facilitate restoration of commercial telecommunication service (cable, broadcast radio, broadcast TV, telecommunications).

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3. Provide temporary means of disseminating public information pending the restoration of disabled commercial radio and television systems in coordination with ESF-15; ensure special considerations are made for those with communications challenges.
4. Following NCC request, initiate Disaster Information Reporting Service and Project Roll Call.

National Telecommunication and Information Administration

1. Provide support as requested

4.0 Oversight, Coordination and Communications

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Incident Command

4.1.2 State

- Missouri State Highway Patrol
- State Emergency Management Agency

4.1.3 Federal

- Federal Emergency Management Agency
- Department of Homeland Security/National Coordinating System

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Law Enforcement
- Local Fire Department
- Local Emergency Medical
- Non-governmental Agencies
- Community Emergency Response Team

4.2.2 State

- Missouri Department of Conservation
- Missouri Department of Corrections
- Missouri Department of Transportation
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri State Water Patrol
- Missouri National Guard
- Missouri State Highway Patrol

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- Civil Air Patrol
- Missouri Voluntary Organizations Active in Disaster

4.2.3 Federal

- Department of Agriculture/Forest Service
- Department of the Interior/
- Department of Commerce
- Department of Defense
- Federal Communications Commission
- General Services Administration

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The EMAC offers state-to-state assistance during governor-declared state of emergency (receiving state). During a NMSZ incident, it is assumed that EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

- The Governor of Missouri will declare a disaster
- SEMA will open an EMAC event in the EMAC Operations System
- Missouri will request assets based on mission assignment
- The assisting state will detail the available assets and estimated costs back to SEMA
- SEMA will approve the resource and cost
- The resource from the assisting state will mobilize and deploy.

For resources that are not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

The table below details potential resources which may be requested through the EMAC system from non-impacted states by pre-incident agreement to Missouri. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C2-6 Pre-scripted EMAC

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	Telecommunications Emergency Response Teams	
	ACU 1000 equipment and operators	
	Satellite Phones and Operators	
	Portable towers and transmitters	
	Amateur Radio	
	Document Unit Team to support Finance and Administration	
	Mobile Communications vehicles	

5.2 Pre-scripted Requests for Federal Assistance

The table below details potential resources which may be requested through the federal government via FEMA Mission Assignments. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C2-7 Pre-scripted Action Request Form

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Commissioner	DPS		Request Communications Support		

6.0 Operational Tools

6.1 Missouri State Agencies – Communications Capabilities

Table C2-8 Missouri Communications Capabilities

Department	Communication Capabilities
Missouri State Water Patrol	The MSWP operates a statewide communications system of repeater towers. The patrol currently has 20 repeater tower sites located near the major lakes and rivers within the state. The towers are all linked to communications in Jefferson City by phone lines. The MSWP maintains a variety of vessels, rescue boats, and 4-wheel drive vehicles equipped with multiple frequency mobile police radios. The State EOC can communicate with our dispatchers directly by transmitting through the tower site at Holts Summit.
Missouri State Highway Patrol	MSHP operates a radio communications system using base stations and mobile radios. The primary radio network consists of very high power transmitters located at the nine troop headquarters. The MSHP Radio System is designated the primary communications point of contact. One station of this network is at the SEOC. MSHP is also responsible for operating the Missouri Warning System.

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Department	Communication Capabilities
Missouri Department of Transportation	<p>The MoDOT operates and maintains an extensive High VHF voice radio communications system. This system consists of over 50 radio towers and repeaters. MoDOT enjoys the use of 3 statewide voice radio channel pairs. These pairs are used and controlled by at the Central Office (CO) and the 10 District offices via consoles and control stations. MoDOT has enhanced its voice radio network with microwave in selected areas. Most of the repeater towers have back up propane-powered generator with a propane tank. MoDOT maintains licenses for up to 5,000 mobile radios across the state. Each mobile and high band VHF (HVHF) handheld has the capability of being programmed via a notebook computer. All mobile radios have the interoperability frequencies installed.</p> <p>MoDOT has developed and fielded 3 Mobile Emergency Response Operations Centers (MEROC). Each MEROC is a mobile communications center with the mission of providing inter-operable communications during and post emergency. Each MEROC has the capability of quickly deploying voice radio and digital operations in the High Frequency (HF), Low Band VHF (LVHF), High Band VHF (HVHF), Ultra High Frequency (UHF) and Satellite communications. Each MEROC has the capability of sending and receiving data via the satellite link. Additionally, each MEROC has the capability of Voice Over IP (VOIP) and Video Teleconferencing (VTC). Each MEROC has its own internal network, printers, and laptop computers. Each MEROC also has the capability to support a volunteer amateur radio operator. Two MEROC trailers are pre-deployed to Chesterfield and Willow Springs and the third is kept in Jefferson City.</p> <p>MoDOT has established a Central Office EOC (CO EOC). REDACTED. Missouri (with alternate sites also determined). The CO EOC serves as the primary point of communications for MoDOT. In addition to all the voice and data radio devices, satellite telephone and internet capability, the CO EOC has a direct link to SEMA via MoDOT's voice radio network.</p>
Missouri Department of Conservation	<p>The present MDC radio system is a high-band, mobile, repeater system that operates statewide on multiple channels. The system consists of programmable units (mobile and hand-held) base station control locations (mostly programmable units), and attending mobile relays located at multiple tower sites.</p> <p>MDC has fixed- and rotary-wing aircraft that operate within the radio system. The Department has several hundred radio-equipped 4x4 vehicles and a number of large trucks and track vehicles. The MDCs Protection Division operates a fleet of 4x4 law enforcement vehicles.</p> <p>All mobile radio units are programmed with all MDC frequencies, as well as Mutual Aid, Fire Mutual Aid, Statewide Sheriff, and other emergency channels. This allows all units to communicate through all districts and regions in the Department.</p>

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Department	Communication Capabilities
State Emergency Management Agency	<p>SEMA offices are located at the MONG – REDACTED. This also serves as the SEOC. The SEMA Control Room is the focal point for transmission and receipt of radio and certain wire line traffic to and from the federal government, state agencies, and local authorities.</p> <p>Upon notification of an actual or impending emergency, the SEOC is activated. Detailed information concerning the SEOC and its operations are contained in Appendix 2 to Annex A, SEOC Standing Operations Guide.</p>
Civil Air Patrol	<p>CAP responds to requests for support in disaster situations by furnishing aircraft qualified ground personnel and pilots to assess damage, perform search operations, and airlift personnel and/or equipment. In coordination with SEMA, MSHP, and the MONG, CAP provides ground-station monitoring on proprietary frequencies in the following services: VHF-AM aircraft, VHF-FM, UHF-AM aircraft, Citizens Radio Service, HF-SSB, and other civilian and military services per prior agreements. CAP also furnishes aerial and ground relay on these proprietary frequencies in voice and digital modes to support their disaster response roles. CAP can provide emergency message relay for other agencies as required. CAP has a radio station assigned to the SEOC in Jefferson City. Upon activation, CAP supplies forward communications centers to support the SEOC as required.</p>
Amateur (“HAM”) Radio	<p>Two organizations provide emergency communications support: ARES and RACES. Both organizations are composed of volunteer, licensed, amateur radio operators who can provide organized emergency communications during disasters. They provide auxiliary radio communications support using established nets throughout the State.</p> <p>Contact with ARES and RACES operators can be established through the Missouri State ARES Emergency Coordinator (EC). Groups of operators and radio networks at statewide, regional, or county levels can be activated. County operations are typically coordinated through county EOCs and can be set up at locations as needed. The State ARES EC can request mutual assistance from ARES districts, which correspond to state highway patrol troop areas. ARES groups are staffed, trained, and coordinated through the ARES statewide network, and they use statewide and national amateur radio networks to pass traffic outside their local areas. RACES groups operate under the direction of their sponsoring agency.</p>

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Department	Communication Capabilities
Missouri National Guard	<p>MONG operates a high-frequency communications net for long-distance communication connectivity between the Net Control Station (NCS) in Jefferson City and all armory and base locations throughout the State. These installations can operate with on-site emergency generator power.</p> <p>Short-range internal task force communications proceed through tactical FM radios and handheld radios carried by personnel or mounted in military vehicles. Communications connectivity is affected by altitude and distance of aircraft.</p> <p>MONG operates an interoperable network of voice, data and video capabilities, in both the secure and non-secure modes. MONG will manage their secure communication assets. MONG, if requested, will provide communications support to SEMA SEOC and the ASEOC.</p>
Missouri State Bureau of Emergency Medical Services	<p>Missouri State Bureau of Emergency Medical Services (BEMS) has no day-to-day interface with the statewide Emergency Medical Services (EMS) communications system. Most hospitals have radio for contacting each other and ambulance vehicles. Most ambulances have radio contact with each other, hospital, fire/law enforcement dispatchers and units/vehicles and (in many cases) an ambulance dispatcher. The statewide EMS channel is also used in surrounding states. No regional EMS communications centers exist.</p> <p>The entire state is covered by rotary-wing (helicopter) EMS services, usually having at least the statewide EMS channel and often synthesized.</p>
Military Auxiliary Radio System	<p>MARS is an official affiliate of the U.S. Army, with a primary mission of providing emergency communications support, on request, to local, state, and federal agencies. The system is composed of volunteer FCC licensed radio operators who are also licensed by MARS, and military radio operators appointed by their unit commanders, to conduct operations on clear channel Department of Defense assigned military frequencies. MARS stations are located throughout the State, and in certain National Guard, Reserve and Active Army military units, and in key locations including major Red Cross Chapters, and in the SEOC at Jefferson City.</p> <p>Missouri Army MARS operates in voice, digital, and phone patch modes on long haul HF military frequencies, and on short haul VHF/UHF military frequencies and connects statewide and worldwide through 24 hour gateways at REDACTED, with twice daily State nets, and on call up 24/7/365. MARS support can be requested through the SEOC.</p>

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Department	Communication Capabilities
Missouri Department of Natural Resources	<p>The Missouri Department of Natural Resources' Environmental Emergency Response (EER) has mobile two-way radio, cellular telephone and satellite telephone capabilities. As an emergency response agency, there are eleven emergency response vehicles located throughout the state. Six of those vehicles are front line hazardous materials spill response trucks that have all modes of communications. The other five vehicles have two-way radio and cellular capabilities. The satellite telephone capability is dual in capacity where it can be used in the response truck or in portable handheld mode. The two-way radio service used is in the VHF band and all the truck-mounted radios that are the 110 watt high power mutual aid channels including channel use agreements with the Missouri Department of Conservation, State Emergency Management Agency, Missouri State Highway Patrol and the United State Environmental Protection Agency. EER also has handheld portable radios and access to six additional vehicles (non-emergency type) and one emergency response boat with two way radios. The EER has an interoperability agreement with the MSHP to use the MTAC channel during larger interagency responses. The Division of State Parks also has mobile two-way radio capability both in their vehicles and as handheld units. The State Park Rangers dispatch through the MSHP but also have base stations at various state park offices.</p>

6.2 Communications Devices, Frequencies, Methods for Response

The acronym P.A.C.E. (Priority Alternate Contingency Emergency) is used to set out by priority the types of communications devices, frequencies and methods that may be employed by the responding entities depicted in Figures C2-3 and C2-4. P.A.C.E. identifies the probable methods of communications based upon priority of the desired communication.

Normal Communications

- Local EOC - Troop (priority)
 - P - Telephone, Cellular, fax, Internet
 - A - Point-to-Point Radio (155.370)
 - C - Radio Relay
 - E - Runner relay
- Local EOC - Responders (priority)
 - P - Land mobile radio (local channels, MTAC, VCALL10)
 - A - Cellular
 - C - Radio Relay
 - E - Runner relay
- Troop - Responders (priority)
 - P - Land mobile radio (Troop channels, MTAC, VCALL10)
 - A - Cellular
 - C - Radio Relay
 - E - Runner relay

Activated Communications

- SEOC - Local EOC (priority)
 - P - Telephone, Cellular, fax, Internet
 - A - Radio Relay
 - C - Satellite Radio Telephone
 - E - Amateur Radio
- SEOC - Troop (priority)
 - P - Telephone, Cellular, fax, Internet
 - A - Radio Relay
 - C - Satellite Radio Telephone
 - E - Amateur Radio
- SEOC - Responders (secondary)
 - P - Cellular
 - A - Radio Relay
 - C - Satellite Radio Telephone
 - E - Amateur Radio

ICP Communications

- ICP - Local EOC (priority)
 - P - Land mobile radio (local channels, 155.370)
 - A - Telephone, Cellular, fax, Internet
 - C - Radio Relay

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- E - Amateur Radio
- ICP - Responders (priority)
 - P - Land mobile radio (local channels, (MTAC, VCALL10)
 - A - Cellular
 - C - Radio Relay
 - E - Runner relay
- ICP - Troop (secondary)
 - P - Telephone, Cellular, fax, Internet
 - A - Radio Relay
 - C - Satellite Radio Telephone
 - E - Amateur Radio
- ICP - SEOC (secondary)
 - P - Telephone, Cellular, fax, Internet
 - A - Radio Relay
 - C - Satellite Radio Telephone
 - E - Amateur Radio

SACC Communications (as activated)

- SACC - SEOC (priority)
 - P - Telephone, Cellular, fax, Internet
 - A - Radio Relay
 - C - Satellite Radio Telephone
 - E - Amateur Radio
- SACC - Troop (priority)
 - P - Telephone, Cellular, fax, Internet
 - A - Point-to-Point Radio (155.370)
 - C - Satellite Radio Telephone
 - E - Radio Relay
- SACC - Local EOC (secondary)
 - P - Point-to-Point Radio
 - A - Telephone, Cellular, fax, Internet
 - C - Radio Relay
 - E - Amateur Radio
- SACC - ICP (secondary)
 - P - Point-to-Point Radio (155.370)
 - A - Telephone, Cellular, fax, Internet
 - C - Radio Relay
 - E - Amateur Radio
- SACC - Responder (secondary)
 - P - Land mobile radio (MTAC, VCALL10)
 - A - Cellular
 - C - Radio Relay
 - E - Runner relay

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**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C3
ESF-3, Public Works**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

The Emergency Support Function ESF-3 Appendix to Annex C of the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for joint local, state, and federal public works operations following a catastrophic earthquake in eastern Missouri. The effort involves a coordinated local/state/federal response. Conducting engineering and public works operations are essential for maintaining and restoring critical infrastructure. The viability of drinking water, waste water and sanitation systems are critical for life sustaining, response and recovery efforts. Clearance of debris from routes that support emergency response operations is necessary immediately after an earthquake. A coordinated debris clearance strategy enables a quicker ability to perform life saving and life sustaining measures immediately after the incident.

Under the Missouri State Emergency Operations Plan (SEOP), the State Emergency Management Agency (SEMA) in coordination with Missouri Department of Natural Resources (MDNR) are identified as the principal coordination organizations for the State of Missouri and the U. S. Army Corps of Engineers (USACE) is identified as the Federal lead agency. ESF-3 at the state level has the equipment to conduct emergency debris clearance along priority transportation corridors allowing ESF-3 to concentrate on its traditional roles and responsibilities.

According to modeling data from the Mid-America Earthquake (MAE) Center, a NMSZ earthquake is expected to have direct impact on 22 Missouri counties and the City of St. Louis. While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire State including the 47 counties recognized by the State as having a high potential to be negatively impacted by a seismic incident. This Plan also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties or the effects of aftershocks are provided unless denoted.

Due to ground shaking and the potential for liquefaction there is a potential for 6.5 million tons of debris created including:

- 2.9 million tons of brick, wood.
- 3.5 million tons of steel and concrete.

Within this debris, white goods, hazardous materials, and other debris will require environmental considerations.

There is additional potential for:

- 15,000 leaks and 21,500 breaks along 165,000 miles of potable water pipelines.
- 123,719 households without water.
- 12,000 wastewater leaks.
- 17,000 breaks to waste water pipelines.

Table C3-1 indicates the types of buildings that will be damaged by the earthquake by occupancy type. Table C3-2 illustrates the type of debris that will be generated by the damaged buildings.

Table C3-1 Building Damage by Occupancy Type for Missouri

General Occupancy Type	Total Buildings	At Least Moderate Damage	Complete Damage
Single Family	1,753,400	61,700	31,800

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General Occupancy Type	Total Buildings	At Least Moderate Damage	Complete Damage
Other Residential	292,600	21,900	10,400
Commercial	35,300	2,000	1,000
Industrial	9,600	600	300
Other	10,900	600	300
Total	2,101,800	86,800	43,800

Table C3-2 Building Damage by Building Type for Missouri

General Building Type	Total Buildings	At Least Moderate Damage	Complete Damage
Wood	1,418,000	40,200	20,300
Steel	17,500	1,200	500
Concrete	5,200	300	200
Precast	5,200	300	200
Reinforced Masonry	2,900	200	100
Unreinforced Masonry	460,200	26,800	14,300
Manufactured Housing	192,800	17,800	8,200
Total	2,101,800	86,800	43,800

Table C3-3 shows the number of facilities that will be damaged by the earthquake. Table C3-4 illustrates the other types of critical facilities that will be damaged.

Table C3-3 Utility Facilities Damage for Missouri

Utility Facilities	Total Facilities	At Least Moderate Damage	Complete Damage
Potable Water Facilities	357	28	0
Waste Water Facilities	7,816	519	0
Natural Gas Facilities	354	64	0
Oil Facilities	167	7	0
Electric Facilities	1,855	117	0
Communication Facilities	21,789	1,536	0

Table C3-4 Other Critical Facilities

Damage for Missouri Facility Type	Total Facilities	Damaged
Dams	5,408	55
Levees	369	25
Hazardous Materials	3,040	32

The following figures show the priority routes designated for evacuation that will need to be cleared of debris (Figure C3-1). Priority routes are subject to change based on initial assessment following an

earthquake event. Figure C3-2 illustrates the critical water treatment facilities that might be affected. Figures C3-3 and C3-4 are drinking water facilities and public water facilities respectively. Figure C3-5 shows the dams that may be damaged and cause flooding.

Figure C3-1 Priority Routes



Figure C3-2 Critical Water Treatment Facilities

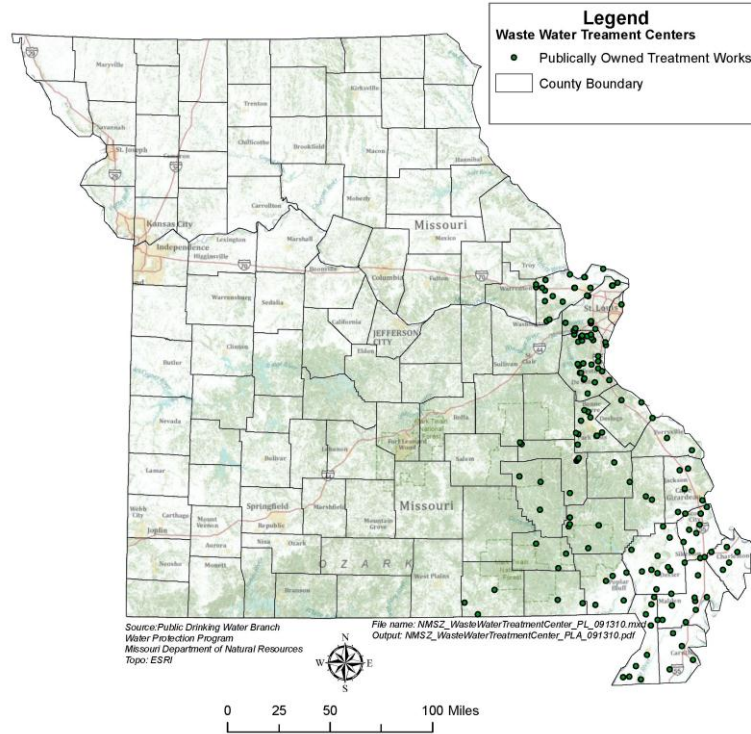


Figure C3-3 Drinking Water Facilities

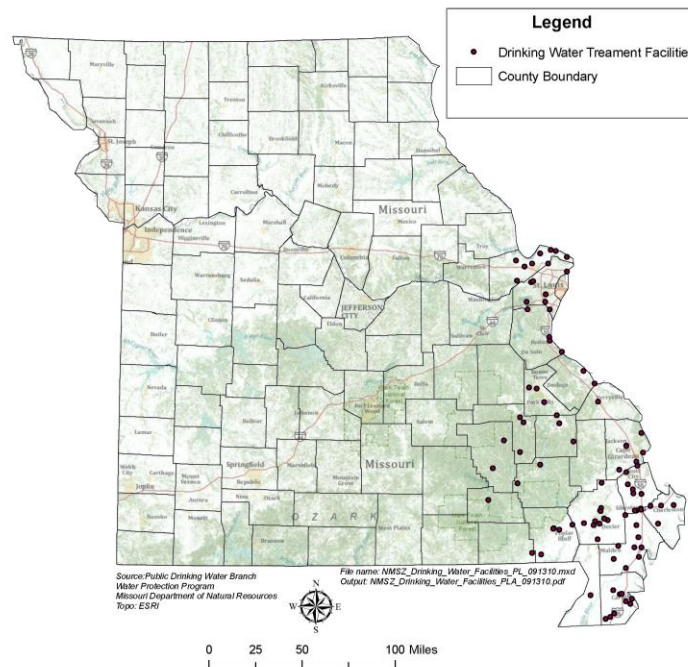


Figure C3-4 Public Water System Facilities

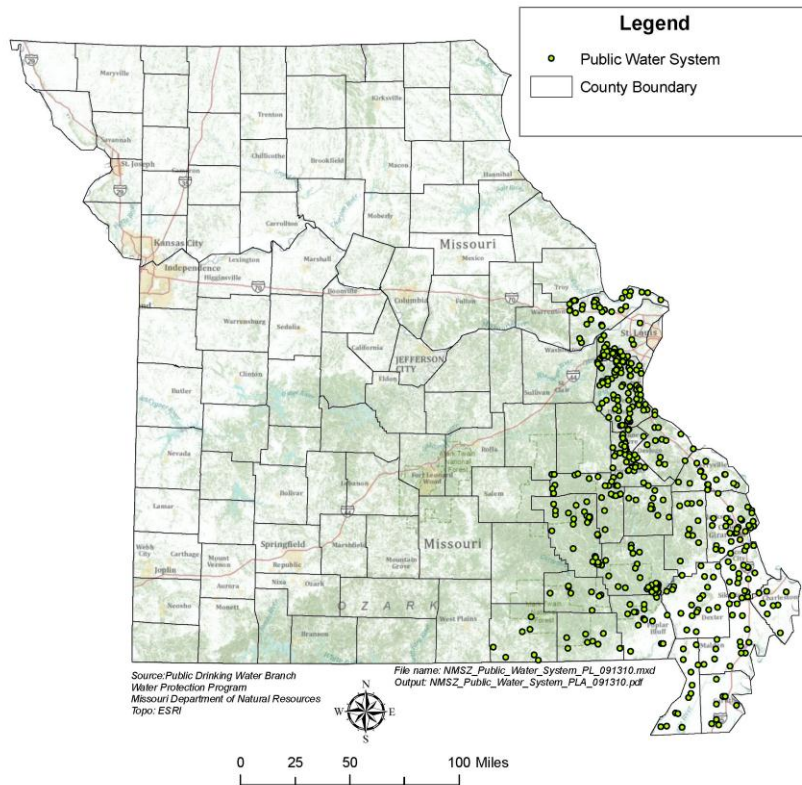
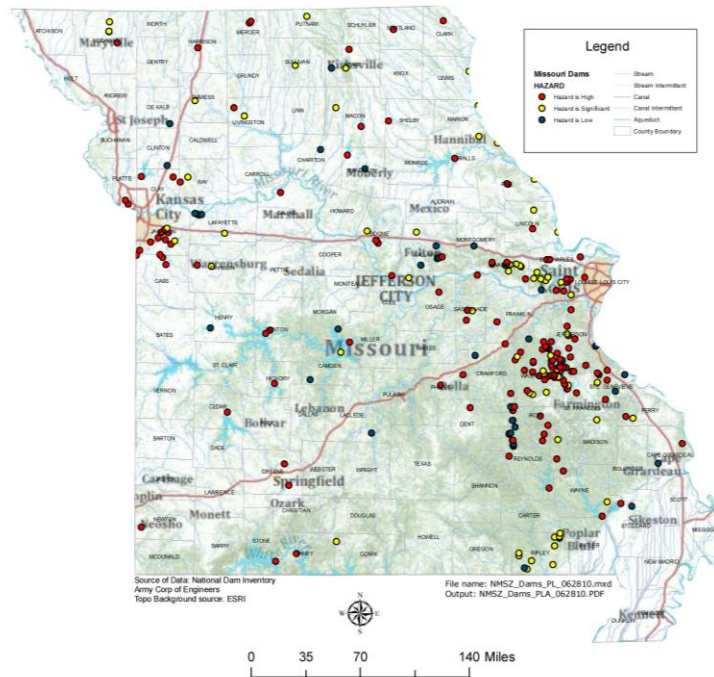


Figure C3-5 Dams



1.1 Purpose

The purpose of this plan is to provide ESF-specific information for the OPLAN. The ESF-3 Annex details the ESF's limitations, organization, and course of action to execute the roles and responsibilities assigned to the ESF during a New Madrid Seismic incident. Specifically, this Annex provides the ESF-3 Coordinator with the basis for evaluating and accepting or redirecting mission assignments and tasks received from other ESFs in response to an earthquake event in the NMSZ. ESF-3 ensures that during a catastrophic earthquake a coordinated response and consideration is provided for; life safety, accessibility and assessment to critical infrastructure, drinking water, and emergency sanitation/waste water treatment and restoration. To accomplish this, this Annex will:

- Establish a strategy for coordinated debris management.
- Define the roles and responsibilities of coordinating and cooperating agencies.
- Describe the process for assessment/viability of critical infrastructure.
- Establish a strategy for emergency sanitation/waste water treatment and restoration.
- Establish a strategy for viability/ provision/restoration of drinking water.

Objective1: Conduct emergency debris clearance
Objective2: Restore critical infrastructure and public services

1.2 Considerations

The following considerations are ESF-3 specific. General considerations are included in Section 1.5 of the Base Plan.

- Debris from damaged or collapsed public and private structures will hamper response operations.
- All types of public and private infrastructure including utilities (electric, gas, water, sewage treatment), transportation (bridges, roads, highways in support of Missouri Dept of Transportation), and critical facilities (public/private) will be severely affected.
- The residents of Missouri are serviced by many different utility companies.
- An intricate system of mutual aid agreements and memorandums of understanding ensure restoration of vital public services occurs as quickly as possible with minimum state assistance.
- Several state departments have professional engineers or engineering technicians located throughout the State.
- Numerous private resources in the State are available to assist engineering and public works activities.
- Should all local resources become committed; outside resources are available upon request.
- The Missouri Structural Assessment and Visual Evaluation (SAVE) Coalition is available for deployment. The SAVE Coalition's objective is to assist the SEMA in the execution of responsibilities with respect to the use of qualified volunteers in the rapid assessment of buildings following a catastrophic event such as an earthquake.
- ESF-3 resources will be needed to:
 - Identify locations for the placement of debris.

- Identify impacted public drinking water systems and coordinate resources for drinking water with other ESFs (5, 6, and 7).
 - Identify impacted regulated sanitation/waste water treatment systems.
 - Provide technical assistance for restoration of public drinking water systems and regulated wastewater systems.
- USACE will maintain and execute its authority under Public Law (PL) 84-99 where appropriate for flood-related disaster response. Other USACE response will be executed under a FEMA Mission Assignment.
- Normal areas of responsibilities for the USACE are defined by water shed boundaries. USACE will adjust their area of responsibilities to fit the political boundaries for the FEMA Regions and the affected states.
- The NMSZ contains many USACE civil works projects including Mississippi River and Tributaries levees, floodwalls, pumping stations, and navigation channels.
- Normal areas of responsibilities for the MDNR are delegated from the U.S. EPA or authorized in state statute and include regulatory oversight of public drinking water systems, sanitary and demolition landfills, regulated wastewater systems, and certain dams in the State of Missouri and overall protection of waters of the State.

1.3 Assumptions

The following considerations are ESF-3 specific. General assumptions are included in Section 1.6 of the Base Plan.

- Life-saving and life-sustaining efforts will be the primary mission of initial disaster operations.
- System interdependencies (food, fuel, electricity, water, sewage, and communications) will be negatively impacted.
- The National Response Framework (NRF), CIS will be activated by Department of Homeland Security (DHS)/FEMA Headquarters to allow federal resources to be mobilized.
- The Governor of Missouri will declare a state of emergency very early post-event, which will allow state resources to be mobilized.
- Debris generated by the earthquake will isolate population centers and hamper all facets of response operations.
- Utility services including electric, natural gas, water, sewer, and sanitation will be disrupted.
- Most local public works departments will not have adequate resources to cope with this major disaster.
- Some local private resources could supplement public resources.
- The utility companies in Missouri are highly organized to deal with disaster response and recovery.
- SEMA will coordinate with other state and federal agencies and local authorities to assist in restoring critical services to facilitate emergency operations.
- Power outages and the widespread destruction of homes, business, utilities and other infrastructure will severely limit reception of emergency transmissions.

- MDNR will coordinate with public drinking water and regulated sewage treatment facilities in all matters concerning water supply and sewage treatment and disposal.
- The MDNR Laboratory will conduct testing of public water and regulated sewage treatment facilities.
- MDNR will coordinate with all permitted demolition and sanitary landfills (including transfer stations) affected by a NMSZ event.
- The MDNR Laboratory and MDHSS State Public Health Laboratory will coordinate and conduct testing of public drinking water systems to ensure restoration of safe drinking water.
- The evaluation of highways, roads and bridges, utilities, dams and other such structures will be conducted by appropriate agencies including the Missouri Department of Transportation (MoDOT), local public works departments, utility owners, MDNR, and the USACE if mission assigned by FEMA.
- Working with local jurisdictions, SAVE volunteers will perform inspections and file follow-up reports:
 - 1st Priority – Hospitals and emergency operations centers (police, fire stations, etc.).
 - 2nd Priority – Other health care facilities.
 - 3rd Priority – Shelters for displaced persons.
 - 4th Priority – Commercial and industrial structures and multi-family residential structures over 3 stories.
 - 5th Priority – Single family residential structures and multi-family residential structures 3 stories or less.
- According to the MAE Center report an earthquake of 7.7 magnitude could generate over 6.4 million tons of debris, including concrete and steel materials that may require special treatment in disposal.
- Overall debris assessment, removal, and management will be coordinated amongst local jurisdictions, SEMA, DNR, USACE, and US Environmental Protection Agency (EPA).

1.4 Limiting Factors

- There will be competition for resources.
- Emergency electrical power generation capabilities are not adequate to meet the expected demand.
- MDNR has limited dam safety engineers to inspect state-regulated dams within the NMSZ.
- Inspection, sampling, and analyses of public water systems and regulated wastewater systems may be limited due to access, transportation, staffing, and laboratory capacities.
- There are not sufficient resources (equipment and personnel) to adequately clear and remove debris.
- Inspection of landfills may be limited due to access and staffing.
- Most local public works departments do not have adequate resources to cope with a major disaster.

2.0 Mission

The ESF-3 mission is to provide public works and engineering-related support. Activities within the scope of this function include:

- Conducting post-incident assessments of public works and infrastructure.
- Providing emergency repair of damaged public infrastructure and critical facilities executing emergency contract support for life-saving and life-sustaining services.
- Coordinating emergency sanitation/waste water treatment and restoration and assessing the viability, provision, and restoration of drinking water.
- Coordinating inspections/assessments of other infrastructure including high-hazard dams.
- Coordinating with ESF-1 to determine emergency routes and priorities for debris clearance.
 - Locate assets to clear transportation routes.
 - Identify the priority routes that will be in support of life saving and life sustaining missions.
 - Open up a transportation network for the distribution of emergency relief supplies, including personnel, to the population centers.
 - Support inspections of bridges and other structures.

MDNR will rapidly conduct response operations under State Authorities. The USACE will rapidly conduct applicable response operations under its own authorities and as permitted under Public Law 84-99. These operations include assessing and repairing USACE flood protection and civil works projects as well as certain navigation infrastructure. This also includes providing flood fight assistance to the State and local communities.

MDNR assesses and inspects public water systems, regulated wastewater systems, landfills (sanitary, demolition, and transfer stations), state-regulated dams, and emergency debris management and overall quality of waters of the State.

As the lead for ESF#3 under the Stafford Act's National Response Framework, USACE may conduct other response operations when specifically mission assigned. These operations may include providing bottled water, ice, commodity oversight, temporary emergency power and infrastructure assessment.

When mission assigned by FEMA, USACE may also conduct recovery operations that include establishing temporary critical public facilities, debris removal, temporary housing, temporary roofing, and water and wastewater assessment and restoration.

USACE will receive support from the Riverine Task Force, the NORTHCOM Joint Task Forces, as well as others to save lives and protect property and critical infrastructure

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases of response within specified periods of time. A description of these Phases is in Section 3.3 of Annex C – Operations. Table C3-5 lists the (sub) phases of Phase 2 (Phases 2a, 2b, and 2c).

Table C3-5 Response Phase Operational Periods

Response Phase	Operational Period
2a – Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Employment/Sustained Response	E + 72 – E + 120 hrs +

The phases of response and operation are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

A 6.5 earthquake along the NMSZ in Missouri will render many critical infrastructure assets, viability of drinking water, sanitation and waste water treatment facilities ineffective or significantly degraded. This will require the coordination of numerous local, state and federal resources to manage this event successfully. Power generation to critical sites may be required and can be supported by USACE.

Water, sanitation and sewage assessment will need to be made at key facilities, etc. to isolate damage, evaluate water suitability and ensure system operation or distribution of potable water. Water system recovery will occur in phases beginning with essential water supply to shelters and other critical infrastructure. In general, priorities for public works response are as follows:

- Immediate life safety.
- Emergency debris management.
- Coordinate potable water supplies with other ESFs (5, 6, and 7).
- Coordinate for waste water treatment needs with other ESFs (6, 7, and 5).

Local Incident Commanders should prepare for the following response times for public works resources:

- Local response time 0 – 2 hours.
- Intra-state regional response time 2 – 12 hours.
- State response time 12 – 24 hours.
- Inter-State response time 12 – 24 hours.
- Federal response time 24+ hours.

3.1.1 Phased Response Concepts

3.1.1.1 Phase 2a: Immediate Response

Gain situational awareness of public works operations taking place at the local level and bring them into a coordinated response effort.

Purpose of Phase

Identify viability of critical infrastructure.

End State of Phase

Finalize initial plans for evaluating and assessing drinking water systems and sanitation and waste water treatment through an integrated, targeted response based upon potential loss of life, life safety and the number of critical infrastructure impacted.

Local Mission-essential Tasks

1. Establish a local Incident Command System (ICS) and prepare to integrate into the Unified Command once established.
2. Mobilize public works assets.
3. Perform missions as tasked by the local Incident Commander (IC).
Begin and continue evaluations of all critical infrastructure and public services, water treatment and restoration.
4. Initiate emergency debris clearance activities and critical infrastructure support and public services as capable.
5. Gather and push forward essential elements of information to the SEOC:
 - a. Damaged/destroyed transportation corridors especially along priority routes.
 - b. Damaged public works assets in the local jurisdiction.
 - c. Status of the water supply in the area.
 - d. Status of waste water in the area.
 - e. Status of power/power generation (generators) to critical infrastructure.
6. Activate Dam Response Action Plan for evaluation of potential hazards if applicable.
7. Determine the status of equipment and resources and report projected needs to the SEOC.
8. Alert or activate off-duty and auxiliary personnel.
9. Relay damage reports and advance warning of all potential problem areas to the SEOC.

State Mission-essential Tasks

State Emergency Management Agency

1. Assist with the coordination of engineering and public works activities with MDNR.
2. Coordinates SAVE coalition activities.
3. Coordinate EMAC requests and requests for federal assistance.

Missouri Department of Natural Resources

1. Initiate internal cost-tracking mechanisms for response-related efforts.
2. Initiate contact through LEOCs with local agencies to determine drinking water, wastewater, and sanitation systems' status.
3. Initiate planning for the evaluation of emergency debris, drinking water, and sanitation/waste water needs.
4. Attempt to ascertain immediate local status and response capabilities.
5. Initiate planning for long-term staffing of SEOC.
6. Provide operational priorities to MDNR-led field teams.
7. Conduct assessment of regulated and non-regulated dams based upon priority.
8. Initiate effort to determine resource requirements and initiate pre-scripted and/or develop EMAC requests and submit through SEMA.

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9. Move mission assigned personnel to state-established staging areas, operational staging areas, established bases, or directly to the incidents as applicable.
10. Send representatives to the SEOC to establish ESF-3 and begin coordination with the local IC.
11. Coordinate activities with other agencies and ESFs.
12. Coordinate with Federal Emergency Response Commission (FERC) regarding dam safety at Taum Sauk Dam and Bagnell Dam.

Missouri Department of Economic Development

1. Public Service Commission: respond to SEOC to initiate information gathering of regulated utilities status.
2. Coordinate mutual aid agreements and memorandums of understanding.

Missouri Department of Higher Education

Initiate a response from Environmental and Safety Departments located in state higher education facilities to affected institutions.

Structural Assessment and Visual Evaluation (SAVE) Coalition

Coordinate additional engineering and technical personnel from county and municipal governments, private contractors, and volunteers.

Missouri Department of Transportation

1. Provide subject matter experts as requested.
2. Coordinate procurement activities.

Missouri Department of Conservation

1. Provide subject matter experts as requested.
2. Provide design assistance, construction assistance, and equipment.

Missouri National Guard

1. Provide subject matter experts as requested.
2. Provides equipment and personnel as requested.

Federal Mission-essential Tasks

United States Army Corp of Engineers

1. Prepare to deploy to the Regional Response Coordination Center (RRCC) or the Joint field Office (JFO) as directed.
2. Send ESF-3 liaison to the SEOC.
3. Coordinate with State partners on Bagnell Dam and reduce its releases appropriately from Harry S. Truman Dam if Bagnell has safety issues.
4. Provide and receive reports and updates from various agencies (local, state, and federal):
 - a. Post-event response capability.
 - b. Efforts to clear of priority routes.
 - c. Status of water supply.

- d. Status of waste water systems.
- e. Status of federal dams and levees.
5. Identify internal communications requirements and capabilities.
6. Activate assets through the RRCC in advance of state requests if possible.
7. Begin inspection of all USACE dams and structures for vulnerability. Assist State with inspection of non-USACE structures if requested and mission assigned by FEMA.
8. Coordinate with federal resources through the JFO, or RRCC.
9. Support mission assignments and resource support with internally-trained personnel.
10. Conduct ESF-3 operations using vast network of equipment through contractors or subcontractors.

3.1.1.2 Phase 2b Deployment

Purpose of Phase

Conduct emergency public works missions to minimize the loss of life, damage to property and to stabilize the incident.

End State of Phase

Local, state and federal partners have implemented a rapid/immediate response to clearing debris prioritizing life safety and security issues and identifying needed critical infrastructure, public service and critical system restoration based upon potential loss of life and number of critical infrastructure impacted.

Private Sector Mission-essential Tasks

1. Assess the need for additional assets and request them from the SEOC.
2. Calculate and convey municipal utility resource shortfalls.
3. Provide situation updates and damage assessment data to the SEOC.
4. Participate in a Business Emergency Operation Center with SEMA if activated.
5. Participate in SAVE Coalition activities.

Local Mission-essential Tasks

1. Assess the need for additional assets and request them from the SEOC.
2. Calculate and convey municipal utility resource shortfalls.
3. Provide situation updates and damage assessment data to the SEOC.
4. Support SAVE Coalition activities.

State Mission Essential Tasks

State Emergency Management Agency

1. Continue to coordinate with Missouri Department of Natural Resources for coordinating engineering and public works activities in the state.
2. Continue to coordinate SAVE coalition activities.

Missouri Department of Natural Resources:

1. Coordinate with ESF-1 to ensure transportation route priorities remain as pre-planned.
2. Coordinate with ESF-6 to capture potable water, emergency sanitation, and wastewater needs.
3. Coordinate with ESF-7 to ensure logistical needs including access to generators are established for public works operations and support.
4. Coordinate with ESF-8 regarding public information associated with potable water.
5. Coordinate with ESF-10 regarding hazardous materials impacts to water and waste water treatment and distribution systems.
6. Coordinate with ESF-12 regarding energy supplies for critical infrastructure.
7. Facilitate coordination between impacted systems and the Missouri Rural Water Association and major local municipalities for capabilities needs.
8. Ensure coordination with other agencies deploying resources into the affected areas.
9. Provide the Joint Information Center (JIC) with updated media briefings regarding drinking water, sanitation, dam and levee safety precautions, debris clearance, waste water systems, etc.
10. Continue gathering information on damaged or destroyed public works facilities.
11. Participate in a Business Emergency Operation Center with SEMA.
12. Initiate pre-scripted or generate EMAC mission requests through SEMA.

Federal Mission-essential Tasks

United States Army Corp of Engineers

1. Provide cellular and satellite communications as well as radio equipment as needed to support their deployment.
2. Deploy liaisons to the State if not already completed to work with ESF-3.
3. Continue to conduct joint assessments to determine priority of deployments.
4. Activate federal assets for ESF-3 as needed in coordination with the SEOC.
5. Act upon pre-script Action Request Forms (ARF) for dam inspectors and dam assessments.
6. Sub-task with EPA regarding water and waste water resource needs and debris removal support.
7. Maintain authority and continue to conduct response activities applicable under Public Law (PL) 84-99 for flood-related disaster response.
8. Provide public works and engineering-related support for the changing requirements of domestic incident management.
9. Support post-incident assessments of public works and infrastructure.
10. Execute emergency contract support for life-saving and life-sustaining services.
11. Provide technical assistance to include engineering expertise.
12. Provide emergency repair of damaged public infrastructure and critical facilities.
13. Support FEMA logistics with the USACE Commodities Teams (potable water and ice).

3.1.1.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

Continue to identify and deploy public works assets to the affected area as more areas become accessible with priority given to life safety, preservation of property, and stabilization of the incident.

End State of Phase

Incident stabilization and the transition of public works capabilities back to the local level in preparation for long term recovery.

Local Mission-essential Tasks

1. Participate in disaster response and damage assessment.
2. Determine needs to maintain essential services within the jurisdiction.
3. Expedite review of waivers.

State Mission-essential Tasks

State Emergency Management Agency

Coordinate with MDNR for prioritization of engineering and public works activities.

Missouri Department of Natural Resources:

1. Determine what regulation waiver may be required to facilitate emergency debris management based on situation.
2. Verify, analyze, and develop reports that provide current operating picture of the incident.
3. Plan for long-term staffing of MDNR personnel at SEOC and, potentially, field assessment teams.
4. Provide situational awareness and deployment requirements for any MDNR staff potentially deployed for ESF 3 missions.
5. Post reports to the designated reporting system.
6. Monitor the status of active mission assignments related to response activities.
7. Begin transition from emergency debris management to longer-term (recovery phase) debris management.
8. Begin demobilization planning.

Missouri Department of Health and Senior Services

Coordinate water system functions of private water supplies serving less than 15 connections and private residential sewer systems.

Federal Mission-essential Tasks

United States Army Corp of Engineers

1. Assist with permitting requests that apply to specific assigned tasks as applicable.
2. Monitor the status of active mission assignments.
3. Continue to accept mission assignments based on capability.
4. Initiate demobilization planning.

4.0 Oversight, Coordination and Communications

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Public Works or Incident Commander

4.1.2 State

- Missouri Department of Natural Resources
- The State Emergency Management Agency

4.1.3 Federal

- U.S. Army Corps of Engineers

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Incident command
- Local Public Works

4.2.2 State

- Missouri Department of Economic Development
- Missouri Department of Health and Senior Services
- Missouri Department of Higher Education
- Structural Assessment and Visual Evaluation (SAVE) Coalition
- Missouri Department of Transportation
- Missouri Department of Conservation
- Missouri National Guard

4.2.3 Federal

- Environmental Protection Agency

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The Emergency Management Assistance Compact (EMAC) offers state-to-state assistance during governor-declared state of emergency (receiving state). During a NMSZ incident, it is assumed that EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

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- The Governor of Missouri will declare a disaster.
- SEMA will open an EMAC event in the EMAC Operations System.
- Missouri will request assets based on mission assignment.
- The assisting state will detail the available assets and estimated costs back to SEMA.
- SEMA will approve the resource and cost.
- The resource from the assisting state will mobilize and deploy.

For resources that are not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

The table below detail potential resources which may be requested through the EMAC system from non impacted states by pre-incident agreement to Missouri. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C3-6 Pre-scripted EMAC Request

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	Dam Safety Inspectors	
	Water Production Damage Assessment, repair & start up Team	
	Water Production Facilities Operations Personnel	
	Water Pump Facilities Damage Assessment and Repair Team	
	Water Lab Support Personnel	
	Water System Flushing, Testing, Sampling & Field Analysis Team	
	Water Distribution System Damage Assessment & Repair Team	
	Water Valve Operations Team	
	Water Mains Leak Location Team	
	Wastewater Treatment Facilities Damage Assess& Start Up Team	
	Wastewater Treatment Facilities Operations Personnel	
	Wastewater Lab Support Personnel	
	Wastewater Lift/Pump Stations Damage Assess, Repair Team	
	Wastewater Sampling and Field Analysis	

REDACTED

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	Team	
	Sewer Mains Damage Assessment and Repair Team	
	Sewer Mains and Manholes Cleaning/SSO/CSO Clean-up Team	
	Water/Wastewater Emergency/Gen. Management Support staff	
	Water/Wastewater Public Information Officer Personnel	
	Water and Sewer Main, Valve, and Manhole Locating Team	
	Water/Wastewater Health, Safety, Environmental Compliance Team	
	Water/Wastewater Electrical Generator/Direct Drive Teams	
	Control Systems, SCADA, Radio Systems Repair/Restoration Team	
	Vehicle and Equipment, Maintenance, Repair/Refueling Teams	
	Facility Access Restoration and Debris Clearing Teams	
	Dump Truck-on Road	
	Backhoe Loaders	
	Generators	
	Hydraulic Truck Cranes	
	Hydraulic Excavator	
	Sewer Jet/Vac Truck	
	Sewer Jet Truck	
	Sewer Power Rod Truck	
	Water Valve Operating Truck	

5.2 Pre-scripted Requests for Federal Assistance

The table below detail potential resources which may be requested through the federal government via FEMA Mission Assignments. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C3-7 Pre-scripted Action Request Form

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Commissioner	DNR		USACE Emergency Power Plan/Response Teams		
	Commissioner	DNR		USACE ICE Planning and Response Team		
	Commissioner	DNR		USACE Water Planning and Response Team		
	Commissioner	DNR		USACE Debris Planning and Response Team		
	Commissioner	DNR		USACE Temporary Housing PRT		
	Commissioner	DNR		USACE Logistics Planning/Response Team		
	Commissioner	DNR		USACE USAR Support		
	Commissioner	DNR		USACE Remote Sensing		
	Commissioner	DNR		USACE Advance Contract Initiative (ACI) to assess power needs generator preparation, hauling, installation, refueling/servicing, de-installation, and return.		

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C4
ESF-4, Firefighting**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

The ESF-4, Firefighting, Appendix to Annex C to the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for supporting local and state firefighting response following a catastrophic earthquake in the State of Missouri.

Under to the Missouri State Emergency Operations Plan (SEOP), the Missouri Division of Fire Safety (MDFS), Office of the State Fire Marshal has primary responsibility for firefighting operations.

Under the National Response Framework (NRF), the United States Department of Department of Forest Service (USFS) is designated as Coordinator and Primary Agency for ESF-4. FEMA and other federal support agencies will employ ESF-4 firefighting support when activated to support the State of Missouri in disaster response.

MAE Center data indicates that the earthquake will result in severely destructive fires due to gas line breaks, electrical transmission disruptions, limited availability of water for firefighting, and restricted firefighter access as determined through HAZUS analysis by the U.S. Geological Survey, MAE Center data and others. MAE Center estimates that there will be approximately 100,200 ignitions in the impact zone that will burn 4.74 square miles or .01% of the total area in the region. These fires will displace 9,023 people.

While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire state including the 47 counties recognized by the state as having a high potential to be negatively impacted by a seismic incident. This Plan also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties or the effects of after shocks are provided unless denoted.

Table C4-1 details the types of structures and facilities that are most likely to be fire hazards following an earthquake.

Table C4-1 Potential Fire Related Hazards in the Affected Area

Facility	Total in impact zone	Moderately Damaged	Completely Damaged
Natural Gas Facility	7816	64	0
Oil Facility	167	7	0
Electric Facility	1855	117	0
Wood Structures	1,418,000	40,200	20,300

Table C4-2 indicates the expected number of natural gas and oil pipeline leaks and breaks following an earthquake that may result in fire.

Table C4-2 Pipelines in the Affected Area

Resource	Total Miles	Estimated Leaks	Estimated Breaks
Natural Gas Pipeline	70,500	12,970	19,002
Oil Pipeline	6400	52	176

It is estimated that 69 fire stations in the impact zone will sustain at least moderate damaged and 45 will sustain complete damage. Therefore, it will be necessary to replace much of the equipment capability in the area. Table C4-3 shows the estimated resource requirements needed to augment/replace damaged and destroyed fire stations (equipment and personnel):

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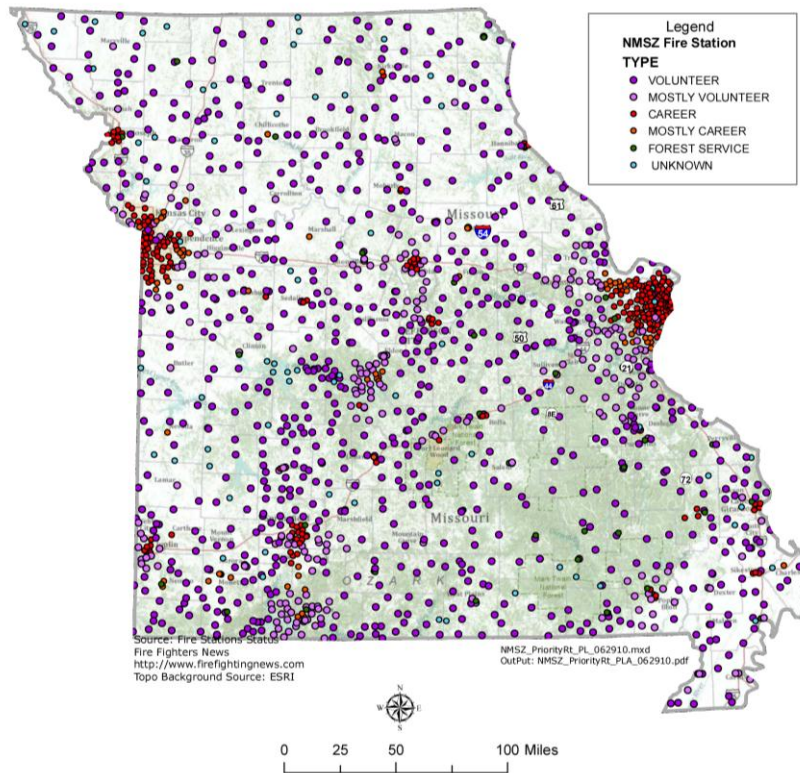
Table C4-3 Expected Needs for Firefighting

Resource Type	Description	Total Requirement	Provided through statewide mutual aid	Support Requirement
USFA Type 3 All Hazard IMT	All Hazard Incident Management team with command, general staff, and unit leader positions	23	3	20
ESF-4 State Coordinator	SEOC ESF-4 Coordinator	6	6	0
ESF-4 Regional Liaison	ESF-4 Regional Fire Liaison	13	13	0
Type I Engine Strike Team	5 Type I engines and a strike team leader	96 to replace damaged assets PLUS 23 more [1 strike team per highly impacted county]	61	58
Water Tenders Strike Teams	5 Type 1, II or III water tenders and a strike team leader	31 to replaced damaged assets PLUS 23 more [1 strike team per highly impacted county]	45	9
Firefighter	Firefighter I/II certified	2600 to replace 40% out of service plus 3150 extra [this includes staffing for above apparatus]	3000	2750
Foam Tender	Type I 500 gallon class B specify concentrate	25	5	20
Brush Truck Strike Teams	5 4-wheel drive trucks with strike team leader	50	50	0
Portable Pumps		100	40	60
Rescue Squads	w/extrication tools	70	50	20

Note: All numbers based on the needs of the 23 highly impacted counties indicated in the MAE Center data. All equipment and personnel estimates are from the Missouri Division of Fire Safety.

MDFS indicates about 80 percent of Missouri fire departments are staffed with volunteers dedicated to the task of fire prevention and suppression. Figure C4-1 shows the comparison of volunteer fire stations to career fire stations in the state. In addition to equipment, 1 fire IMT will be required per highly impacted county and an estimated 25,481 personnel for firefighting operations.

Figure C4-1 Fire Stations



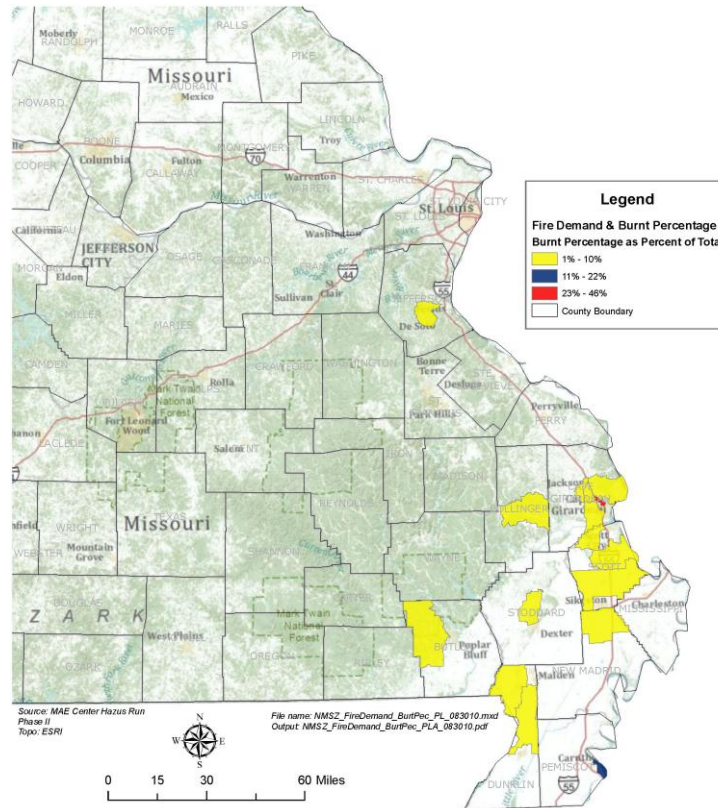
It is difficult to estimate the number of fires that will occur during a catastrophic earthquake. Fires that do not pose an immediate or immanent threat to life or public safety may be considered a lower response priority in order to conserve water and to preserve firefighting assets. Immediate fire suppression and lifesaving actions will be undertaken primarily by the local first responders. Based on the lack of local resources, there will be an immediate need for additional fire resources and Incident Support Teams (IST). Resources summoned through the Missouri Fire Mutual Aid System could begin arriving within hours but may take as long as 48 hours for out-of-state and federal resources. Through ESF-4, FEMA may mission assign USFS and Department of Defense (DOD) assets to support local and state fire-suppression operations. Fire resources will deploy to the designated staging areas, identified by Logistics. Figures C4-2, C4-3 and C4-4 indicate gas and electrical facilities that pose a fire threat following an earthquake. Figure C4-5 shows the locations in the state more likely to have fires following an earthquake.

Figure C4-2 Pipelines and Pipeline Interconnects – REDACTED

Figure C4-3 Gas and Oil Facilities - REDACTED

Figure C4-4 Electrical Grid - REDACTED

Figure C4-5 Fire Burn Percentage in the Affected Area



1.1 Purpose

The purpose of this Appendix is to provide ESF-specific information for the OPLAN. The ESF-4 Appendix details the ESF's limitations, organization, and course of action to execute the roles and responsibilities assigned to the ESF during a New Madrid Seismic incident. The OPLAN Appendix identifies roles and responsibilities, enhancing unity of effort, and links existing plans. Specifically, this Appendix provides the ESF-4 Coordinator with the basis for evaluating and accepting or redirecting mission assignments and tasks received from the state and/or FEMA in response to an earthquake event in the NMSZ.

Objective: Conduct hazardous material response and firefighting operations

1.2 Considerations

- Fire, hazmat, search and rescue (S&R), and emergency medical system (EMS) operations pull from the same pool of resources.
- Situations could arise that would hinder firefighting capabilities or overwhelm local resources.
- Networks of natural gas pipelines, crude oil pipelines, and bulk product pipelines are located throughout the state.

- Due to ground shaking and the potential for liquefaction it can be expected that fires will occur primarily due to ruptured gas lines and electrical shortages, there are 354 miles of natural gas pipeline in the affected area and it is estimated that 117 electrical facilities will be damaged. Priorities will be as follows:
 - Life safety.
 - Fire suppression.
 - Development of a common operating picture.
 - Assessment.
 - Transportation of resources.
 - Establishment of communications.
 - Restoration of local fire capabilities.
 - Safety monitoring for first responders.
- Prioritization of calls and responses will be required. Matching resource type to incidents where they can provide the most benefit will occur, with lower priority calls not being immediately addressed. Additionally, the type of incident and security considerations will also influence decision making when triaging a particular emergency response.

1.3 Assumptions

- Firefighting resources will be engaged with S&R and Emergency Medical Services (EMS) activities and the capacity for addressing fighting fire will be limited. Fires will be prioritized according to life safety.
- Outside assistance (federal, state, or other local jurisdictions) will be available when required.
- Fire services may assist other agencies to execute their emergency assignments as requested and as resources allow.
- A statewide mutual aid system is used to coordinate fire-based emergency responders.
- Missouri volunteer and full-time fire departments maintain equipment and staff trained to perform fire protection duties (fire suppression, S&R, and hazmat).
- At the state level, ESF-4 will initially be limited in supporting all requests for firefighting resources. Public information notices will be developed and distributed to help the public understand that firefighting resources will be available for high priority incidents based on life safety.
- Firefighting priorities will be established using the following priorities in order of importance: life safety, incident stabilization, and property conservation. Fires not threatening loss of life may be allowed to burn themselves out while fire personnel manage perimeter safety
- According to MAE Center data the earthquake will result in severely destructive fires from gas line breaks, electrical transmission disruptions, limited availability of water for firefighting, and restricted firefighter access.
- Critical water pipelines, tunnels, bypasses, pumping stations, supply lines, and feeder mains will fail, negatively impacting the provision of water for fire suppression.
- In-state mutual aid resources (local and state levels) will arrive within 8 hours.

- Logistical support will be needed to support ongoing fire operations, including the need to provide for alternate facilities, as many fire stations will be inoperable.
- Fires and structural damage, particularly in urban areas will require extensive structural firefighting resources.

1.4 Limiting Factors

- Resources will be severely affected; it is estimated in MAE Center Data that 114 fire stations and associated equipment may be damaged and possibly destroyed in the affected areas.
- Personnel may have an absentee rate of up to 40% following the incident¹, and they may not be able to communicate with their respective fire agencies. On-duty personnel will have immediate concerns for their family and property, especially if communication lines are down. Roads may be blocked or impassible; damage to personal property and injuries may affect the ability to report to work.
- The lack of fuel for firefighting apparatus will be an issue. Fuel usage rates may be higher than usual, fuel supplies may be damaged, and fuel transportation may be limited due to road damage and debris.
- Secondary damage to equipment, such as flat tires from debris, may render some equipment unavailable or require repeated repairs, and the availability of supplies and parts for these repairs may be limited.
- Damaged underground storage tanks and natural gas wells may further impede first responder response efforts.
- Power failures will hamper dispatching, response, and staff support.
- There is no uniform system in place to provide access control at perimeters, including credentialing and access verification for first responders.
- There may be limited aircraft available to move teams, supplies, and commodities to the disaster area.
- Weather may inhibit the restoration of the logistics infrastructure.

2.0 Mission

Local, state and federal partners will coordinate to assess and respond to fires based on life sustainment and accessibility of the area immediately following a catastrophic earthquake.

The mission of firefighting operations following an earthquake disaster is to provide coordinated response by local, state and federal resources to minimize the effects of fires on the population and the environment. MDFS is responsible for situational awareness, prioritization, and coordination of firefighting response efforts.

Federal ESF-4 Firefighting provides federal support for the detection and suppression of rural and urban fires resulting from, or occurring coincidentally with, an incident requiring a coordinated federal response for assistance. ESF-4 manages and coordinates firefighting activities, including the detection and

¹ This information was taken from several publications about Continuity of Operations and Continuity of Government. The number is derived from several studies of business during and after large scale disasters such as Hurricane Katrina.

suppression of fires on federal lands, and provides personnel, equipment, and supplies in support of state and local agencies involved in rural and urban firefighting operations.

Firefighting priority will be given to 1) life safety (firefighters and the public), and 2) protecting property and the environment, in that order.

National support is accomplished through the National Interagency Coordination Center (NICC) located at the National Interagency Fire Center (NIFC) in Boise, ID. All support provided by the NICC will be coordinated with the Regional Response Coordination Center (RRCC). Coordination with and support of local and state fire suppression organizations is accomplished through Missouri Department of Conservation (MDC), State Fire Marshal, State Emergency Management Agency (SEMA), or other appropriate state agency fire suppression organizations operating under the Incident Command System (ICS) element of the National Incident Management System (NIMS) Command and Management component.

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases of response within specified periods of time. A description of these Phases is in Section 3.3 of Annex C – Operations. Table C4-4 lists the (sub) phases of Phase 2 (Phases 2a, 2b, and 2c).

Table C4-4 Response Phase Operational Periods

Response Phase	Operational Period
2a – Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Employment/Sustained Response	E + 72 – E + 120 hrs +

The phases of response and operation are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

3.1.1 General Concepts

In general, priorities for fire response are as follows:

- Immediate life safety.
- Assess fires and control those that provide immediate threat to life safety.
- Development of a common operating picture and establishment of command structure according to ICS.
- Transportation of resources.
- Establishment of communications.
- Restoration of local fire capabilities.

Immediate fire suppression and life-saving actions will be undertaken by the local first responders. There will be an immediate need for increased capabilities for fire resources, along with incident management teams. Out-of-region resources may begin arriving within hours but may take as long as 48 hours for out-

of-state and federal resources. Through ESF-4, FEMA may mission assign USFS and DOD assets to support state and local fire suppression operations.

The local IC should prepare for the following response times for firefighting response resources:

- Local response time 0 – 2 hours.
- Intra-State response time 2 – 17 hours.
- Inter-State response time 12 – 24 hours.
- Federal response time 24+ hours.

3.1.2 Phased Response Concepts

3.1.2.1 Phase 2a: Immediate Response

Purpose of Phase

Gain situational awareness of firefighting operations taking place at the local level and bring them into a coordinated response effort.

End State of Phase

Development of a common operating picture and implementation of a coordinated response effort for firefighting in the affected area giving priority to life saving measures.

Local Mission-essential Tasks

The local IC will initiate firefighting activities using available resources. Resources that will be needed for firefighting may be tasked in S&R operations and therefore, not be available for immediate response. Mutual aid agreements exist within the state between municipalities, counties, and fire protection districts. Mutual aid agreements provide the mechanism for one local agency to assist another during an emergency. The local IC will be required to prioritize fires and S&R activities and access any local mutual aid agreements for support until state and federal assets can be acquired to assist. The specific ESF-4 tasks to be accomplished by local agencies are listed below:

1. Implement appropriate emergency operations.
2. Coordinate response with local EMS providers.
3. Notify the SEOC of the local ICS structure and who is serving as the local IC
4. Prepare for an influx of first responders
5. Mobilize local firefighting assets
 - Perform missions as tasked by the local IC.
6. Gather information about:
 - a. Damaged fire assets in the local jurisdiction.
 - b. Status of the water supply in the area.
 - c. Approximate number of fires.
 - d. Pass all information to the SEOC.
7. Alert key fire personnel according to procedures established in departmental call lists.
8. Determine the status of equipment, personnel, and resources and provide reports with projected needs for the next operational period to the SEOC.

9. Provide operational priorities and rules of engagement to field teams.
10. Relay damage reports and advanced warning of all potential problem areas to the SEOC.

State Mission-essential Tasks

MDFS coordinates a Statewide Fire Mutual Aid System; under this system, state and local firefighting resources from local and state jurisdictions throughout Missouri will respond to the earthquake. This system enhances the ability of volunteer or career fire departments to handle major fires or incidents within their jurisdictions. To compliment the Statewide Fire Mutual Aid System, an incident support team (IST) concept has been developed in regions of the state. An IST will be deployed as available to local jurisdictions to assist with coordination of the incident response. Firefighting operations will be tasked out to available local, state or federal resources on an as-needed basis. Fires incidents that pose an immediate threat to life will be considered the highest priority for mission assignment.

MDFS is the lead agency for firefighting response in Missouri and will coordinate all firefighting activities. Responsibilities of state agencies are described in the Missouri SEOP, Annex M (Firefighting). The specific tasks to be accomplished by state agencies are listed below:

Missouri Division of Fire Safety, Office of the Fire Marshal:

1. Coordinate the State Fire Mutual Aid System and track the movements of fire mutual aid resources assigned to the response.
2. Coordinate with local EOC firefighting resources to prioritize fire suppression activities and other functions for:
 - a. Protection of life and safety (highest imperative).
 - b. Property protection.
 - c. Environmental protection.
3. Send representatives to the SEOC for ESF-4, begin coordination with the local ICs, and other state, federal, and cooperating agencies.
4. Determine resource requirements and process the pre-scripted EMAC requests. Move mission assigned assets and overhead personnel to staging areas, operational fire staging areas, established bases, or directly to the incidents as applicable.
5. Coordinate with ESF-7, ESF-1, and ESF-2 to ensure logistical needs and other support requirements are met for ESF-4 operations.
6. Coordinate the integration of intra-state, inter-state and federal resources into the local incident command structure.
7. Implement an ESF-4 information collection plan to gather essential elements of information.
8. Provide operational priorities and rules of engagement to field teams.
9. Obtain information from local fire agencies and conduct reconnaissance to obtain situational status within the affected areas to include:
 - a. Post-event response capability.
 - b. Status of water supply.
 - c. Number and severity of incidents.

Missouri Department of Public Safety:

Provide support to the State Fire Marshal for inspection and investigation assistance as requested.

Missouri Department of Transportation:

Coordinate with ESF-1 and Air Ops on selected routes to enable resources to reach assigned reporting locations.

Missouri State Highway Patrol:

1. Coordinate security issues for fire operations and support activities as requested.
2. Provide perimeter security in and around fire incidents as capability allows and as requested.

Missouri National Guard:

1. Support reconnaissance and response asset movement as available.
2. Request additional (other states) National Guard assets, including additional Civil Support Teams (CST), CBRNE Emergency Response Force Package (CERFP) to expand/sustain MONG capabilities as required.

Missouri State Emergency Management Agency:

Coordinate EMAC and federal requests for fire assistance with ESF-4.

Federal Mission-essential Tasks

The U.S. Department of Agriculture/USFS is the lead agency for ESF-4, firefighting. USFS manages and coordinates the mobilization for firefighting resources in support of local and state rural and urban firefighting agencies.

The ESF-4 specific tasks to be performed by federal agencies are listed below:

U.S. Forest Service:

1. Send ESF-4 liaison to the SEOC.
2. Activate assets through the RRCC in advance of state requests if possible and deploy assets to the federal staging areas.
3. Coordinate federal resources through the RRCC.

Federal Emergency Management Agency:

4. Provide and receive reports and updates as required from various agencies (local, state, and federal)
 - a. Damaged fire assets in the local jurisdiction.
 - b. Status of the water supply in the area.
 - c. Approximate number of fires.
5. Identify communications requirements and capabilities.
6. Work with other federal agencies to determine what they are doing under their own authorities and report to the RRCC for a common operating picture.

3.1.2.2 Phase 2b: Deployment

Purpose of Phase

Conduct firefighting response missions to minimize the loss of life, damage to property and to stabilize the incident.

End State of Phase

Local, state and federal partners have implemented a coordinated response to fires prioritizing life saving measures.

Local Mission-essential Tasks

1. Assess the need for additional assets and request them from the SEOC.
2. Continue to provide situation updates and damage assessment data to the SEOC.
3. Anticipate the capabilities required to respond to regular fire calls and make requests to the SEOC as appropriate to maintain ongoing staffing.

State Mission-essential Tasks

Missouri Division of Fire Safety

1. Coordinate mutual aid requests statewide, for inter-state and federal firefighting assistance, deploy and track assets.
2. Update the JIC with fire-related public information messages regarding fires, gas leaks, etc.
3. Begin assimilating information for the re-establishment of damaged or destroyed fire facilities.
4. Provide objectives for incident action planning and priorities for the next operational period to the planning section and to the field teams.
5. Coordinate mutual aid personnel resources to support long term support of operations.
6. Maintain communications plan in coordination with ESF-2.

Federal Mission-essential Tasks

U.S. Forest Service:

1. Requests assistance from supporting agencies as necessary to accomplish ESF-4 responsibilities.
2. Coordinate the suppression of wildfires burning on National Forest System lands and participate in firefighting with the local jurisdiction on incidents threatening National Forest System lands.
3. Arranges for direct liaison with SEOC, local EOCs, and fire chiefs in the affected area, as appropriate, to coordinate requests for firefighting assistance in structural or industrial fire detection, protection, and suppression operations.

Environmental Protection Agency:

1. Provide technical assistance and advice in the event of fires involving hazmat.
2. Provide assistance in identifying critical water systems requiring priority restoration for firefighting.

Federal Emergency Management Agency:

1. Coordinate with the USFS to obtain pre-established fire caches and support supplies.
2. Continue to conduct joint assessments to determine priority of deployments.
3. Employ federal assets for ESF-4 from federal staging areas as needed in coordination with the SEOC.

Department of Agriculture:

Monitor the impact of the incident on natural resources under USDA's jurisdiction.

National Oceanic and Atmospheric Administration:

1. Provide operational weather data and prepare forecasts tailored to support the response, through the Interagency Modeling and Atmospheric Assessment Center (IMAAC).
2. Predict pollutant fate, effects, and transport as a function of time when requested.
3. Provide weather forecasting as needed from the National Interagency Fire Center (NIFC) or from the National Weather Service Forecast Office in Kansas City, Springfield or St. Louis, MO under the terms of existing interagency agreements.
4. Provide forecasts of the dispersion of smoke in support of planning and response activities.

US Army Corps of Engineers:

Provide contracting services through ESF-3, Public Works and Engineering to urban and rural firefighting forces to obtain heavy equipment and/or demolition services as needed to suppress fires.

Department of Health and Human Services:

Provide assistance on all matters related to the assessment of health hazards at a response and protection of response workers and the public health.

Department of State:

Coordinate with foreign governments on identification and movement to the United States of assets and resources for firefighting assistance if needed.

Department of the Interior

1. Assist the USDA/Forest Service in managing and coordinating firefighting operations.
2. Provide firefighting assistance to other federal land management organizations as requested under the terms of existing agreements and the NRF.

3.1.2.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

Continue to identify and deploy firefighting assets to the affected area as more areas become accessible with priority given to life safety, preservation of property, and stabilization of the incident.

End State of Phase

Stabilization of the incident and transition of firefighting capabilities back to the local level in preparation for long term recovery

Local Mission-essential Tasks

1. Ensure there is adequate staffing for fire response not related to the larger incident.
2. Determine the needs to maintain essential services within the jurisdiction.
3. Validate initial assessments of fires for the SEOC.
4. Participate in disaster recovery and damage assessment.
5. Triage fire incidents.
6. Begin demobilization planning.
7. Maintain a common operating picture and continue to pass assessment information and damage reports to the SEOC.

State Mission-essential Tasks

Missouri Division of Fire Safety:

1. Continue to implement the information collection plan to gather essential elements of information.
2. Continue to provide information to the JIC about fire safety for the public.
3. Verify, analyze, and develop reports that provide current operating picture of the incident.
4. Provide situational awareness and deployment requirements for lifesaving response teams.
5. Provide data for situational reporting and incident action planning.
6. Monitor the status of active mission assignments related to response activities.
7. Gather appropriate documentation for fiscal closeout.
8. Begin demobilization planning.

Federal Mission-essential Tasks

Joint Tasks – U.S. Forest Service and Federal Emergency Management Agency:

1. Monitor the status of active mission assignments.
2. Maintain a common operating picture.
3. Begin demobilization planning.
4. Provide situational awareness and deployment requirements for lifesaving response teams.

4.0 Oversight, Coordination and Communications

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Fire Chief or Local Incident Command

4.1.2 State

- Missouri Division of Fire Safety, Office of the Fire Marshal

4.1.3 Federal

- U.S. Department of Forest Service

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Fire Department
- Local Law Enforcement

4.2.2 State

- Missouri Department of Public Safety
- Missouri Department of Natural Resources

- Missouri State Highway Patrol
- Missouri State Emergency Management Agency
- Missouri Department of Conservation
- Missouri Department of Health and Senior Services
- Missouri Department Transportation

4.2.3 Federal

- Department of Defense
- Department of Homeland Security
- Department of the Interior
- Department of State
- Environmental Protection Agency
- Department of Energy
- Department of Health and Human Services
- Department of Transportation
- General Services Administration

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The Emergency Management Assistance Compact (EMAC) offers state-to-state assistance during governor-declared state of emergency (receiving state). During a NMSZ incident, it is assumed that EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

- The Governor of Missouri will declare a disaster
- SEMA will open an EMAC event in the EMAC Operations System
- Missouri will request assets based on mission assignment
- The assisting state will detail the available assets and estimated costs back to SEMA
- SEMA will approve the resource and cost
- The resource from the assisting state will mobilize and deploy.

For resources that are not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

Table C4-5 lists potential resources that may be requested for Missouri through the EMAC system from non-impacted states according to pre-incident agreement. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C4-5 Pre-scripted EMAC Requests

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	Engine Strike Team Type I	
	Tanker Strike Team Type I	
	All Hazard Incident Management Assistance Team Type III	
	Document Unit Team to support Finance Administration	
	Fire/Hazmat Teams to support ICS and field operations	

5.2 Pre-scripted Requests for Federal Assistance

Table C4-6 lists potential resources that may be requested through the Federal Government via FEMA MAs. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C4-6 Pre-scripted Action Request Form

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Commissioner	DPS		USDA Air Tankers		

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Appendix C5 – ESF-5, Emergency Management

Joint Missouri & Region VII Response Operations Plan

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C5
ESF-5 – Emergency Management**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

The Emergency Support Function (ESF)-5 Appendix to Annex C of the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for joint local, state, and federal emergency management operations following a catastrophic earthquake in the southeastern part of Missouri. Additional information common to emergency management is included in the Base Plan, Annex A – Incident Organization, and Annex B – Situational Awareness.

The scenario for this incident was developed by The Mid-America Earthquake (MAE) Center. Supplemental loss estimation data was based on FEMA's December 2005 Hazards U.S. Multi-Hazards (HAZUS-MH) model Earthquake Event Report, Southeast Missouri. The impacted counties highlighted in this plan were identified via a cumulative review of direct damage and loss of functional capabilities associated with infrastructure, social impacts, and direct economic losses according to the models used to generate the NMSZ scenario. Damage, operational capabilities losses, and direct economic losses would not be confined to these counties, but would be most severe in these areas. All counties in Missouri would be impacted by a New Madrid incident, though the impacts would be less severe outside the area of the designated impacted counties. As a no-notice incident, this ESF-5 appendix is a flexible document that specifies initial (incident to 120 hours+) organization and automatic response functions while allowing stakeholders at all levels to build situational awareness and muster necessary resources to save and sustain lives, protect property, and promote economic and social recovery. While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire State, including the 47 counties recognized by the State as potentially vulnerable to negative impacts from a seismic incident. This OPLAN also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, this OPLAN cites data from the additional 25 counties and effects of aftershocks only when references to these are required to lay out specific circumstances.

During a disaster, all levels of government are responsible for providing for the health, safety, and welfare of citizens. However, the extraordinary requirements of the NMSZ earthquake will significantly exceed capabilities of most jurisdictions. ESF-5 will need to leverage all available resources—local, state, federal, private, and volunteer—in order to meet needs generated by the incident. Early integration of ESF-5 authorities into operations is essential.

Under the State of Missouri Emergency Operations Plan (SEOP) Annex A, D, and S, the Missouri State Emergency Management Agency (SEMA) has primary responsibilities for the direction and control, damage assessment and incident analysis, and continuity of government (GOG), respectively. The SEOP specifies ESF-5 activities as emergency operations necessary to coordinate disaster relief efforts for rapid return to pre-emergency conditions, and to coordinate procedures for implementing supplemental federal disaster assistance available under PL 93-288, the Robert T. Stafford Disaster Relief Act of 1988, as amended by PL 100-707.

Under the National Response Framework (NRF), the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) is designated as Coordinator and Primary Agency for ESF-5. At the federal level, ESF-5 provides a mechanism for coordinating support to state, regional, and local governments; nongovernmental organizations (NGO); and the private sector through mission tasking (state) and mission assignments (federal).

While SEMA and FEMA have lead roles in facilitating and optimizing use of ESF-5 resources, they will rely on the support agencies to bring the required resources to bear. Participation in a holistic, coordinated emergency management effort is critical to achieve the most efficient, effective results. Federal agencies providing emergency management assistance under independent authorities to state and local governments, the private sector, and individuals, must coordinate assessments, identifications, and

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resolutions of issues through ESF-5 in contributing to this joint effort. State and local governments and the private sector have lead roles in defining and addressing risk and response priorities, and in the community emergency response operations planning process. Federal ESF-5 agencies will coordinate emergency operations planning efforts with these stakeholders, as possible. Federal support will be tailored to the type, extent, and duration of the incident, and to availability of federal resources.

Within the impacted area, 22 county-level emergency management centers are expected to be overwhelmed and to require outside emergency management assistance. For planning purposes, Missouri's three existing Incident Support Teams (IST) are anticipated to remain in their home jurisdictions because of need to support emergency management activities associated with evacuation and mass care. Thus, need for 22 ISTs from outside Missouri is expected. Additionally, FEMA will fully employ a Tactical Field Organization in accordance with the National Incident Management System (NIMS)/Incident Command System (ICS) methodology, to include Mobilization/Incident Staging Bases, Branch Offices, and Division Supervisors. Division Supervisors will be Federal Coordination Officers (FCO) or equivalent. FEMA will send Incident Management Assistance Teams (IMAT) to the City of St. Louis and State Area Coordination Centers (SACC). Finally, Missouri's National Guard (MONG) will deploy a liaison officer to all county-level organizations within the impacted area, area of immediate response, and support areas. Table C5-1 lists anticipated required emergency management support.

Table C5-1 Projected Emergency Management Support Needed

Resource Type	Quantity of Resource Needed
County-level Emergency Operations Centers (EOC)	
Type II IST	22 Type II ISTs to support County/City Level EOCs
State Provided	0 Teams
Federal Support Requirement	22 Type II ISTs
Type I IMAT	1 National IMAT to support the City of St. Louis EOC
State Provided	Not Applicable
Federal Support Requirement	1 National IMAT
Division Supervisor	22 Liaison Officers to support County-level EOCs
State Provided	Not Applicable
Federal Support Requirement	22 Liaison Officers
MONG LNO	114 LNOs to support County-level EOCs
State Provided	114 Personnel
Federal Support Requirement	0 Personnel
State Area Coordination Center	
Type II IMAT	2 Type II IMAT to support SACCs
State Provided	Not Applicable
Federal Support Requirement	2 Type II IMATs
Branch Manager	2 Branch Managers at the SACC to integrate Division Supervisors
State Provided	Not Applicable
Federal Support Requirement	2 Branch Managers

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Appendix C5 – ESF-5, Emergency Management Joint Missouri & Region VII Response Operations Plan

Resource Type	Quantity of Resource Needed
State Emergency Operations Center	
Technical Analysts	30 Personnel. One for each state ESF x 2 per shift (12-hour)
Administration & Support personnel	12 (1 for every 5 information and analytical personnel) x 2 per shift (12-hour)
Intelligence Personnel	30 Personnel. One for each state ESF x 2 per shift (12-hour)
Total Requirement	72 Personnel
State Provided	72 Personnel
Federal Support Requirement	0 Personnel

The NMSZ will require extensive ESF-5 operations. According to modeling data from the MAE Center, the major impacts of the earthquake expected in the 22 highest impacted Missouri counties are as follows:

- 14,125 people with casualties
- 686 fatalities
- 6.5 million tons of debris created
- 87,000 buildings damaged; 44,000 buildings completely destroyed including the critical infrastructure and key resources (CI/KR) listed in Table C5-2:

Table C5-2 Estimated Facility and Infrastructure Damages

CI/KR Specific Damages			
7 Hospitals	69 Fire Stations	53 Police Stations	136 Schools
1,004 Bridges	28 Airports	51 Ports	23 Railroad Facilities
2 Railroad Bridges	55 Dams	25 Levees	29 Hazmat Facilities

Structural damage and safety assessment must be conducted to determine the extent of damage to civil, commercial, and residential infrastructure. Teams will be needed to perform structural inspections and for mitigation activities. Capabilities include provision of contractor management, construction management, cost estimating, technical assistance, and other engineering services to support and manage response and recovery operations. The Missouri Department of Transportation (MoDOT) Post-incident Bridge Inspection Teams (PIBIT) will manage highway Infrastructure. SEMA will activate and deploy the Structural and Visual Evaluation (SAVE) Coalition to lead the infrastructure Damage Assessment Teams. Figure C5-1 shows anticipated numbers of damaged structures within areas that will be affected most by the incident. Table C5-3 lists information regarding Damage Assessment Teams.

Figure C5-1 Damaged Structures in Areas of Greatest Impact

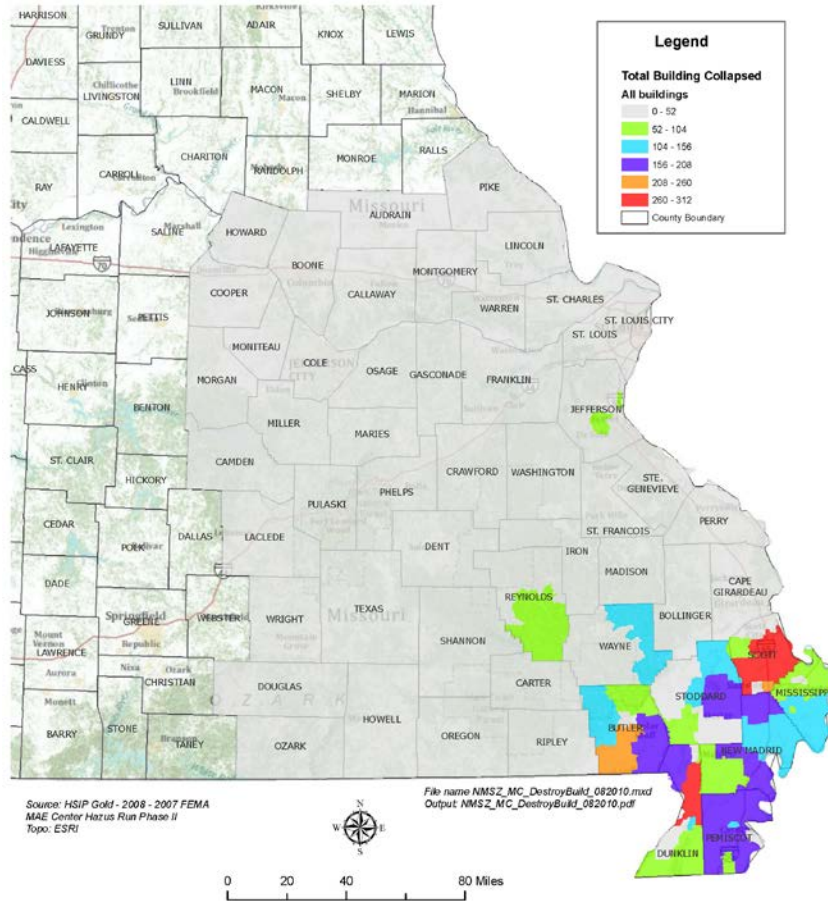


Table C5-3 Facility Damage Assessment Teams

Damage Assessment Team Assumptions	
Buildings per damage assessment teams per Operational Period ¹	25
Hours per day ²	12
Total mission hours ³	396
Deployment hours ⁴	72
Available mission hours ⁵	324
Personnel per damage assessment team ⁶	2

¹ This assumes that a two-person damage assessment team will conduct 25 primary building assessments in a 12-hour work period.

² A 12-hour work period has been selected due to the need to conduct safe assessments in daylight hours.

³ Represents 30 12-hour operational work periods.

⁴ Represents an estimate for Damage Assessment Teams to be fully deployed.

⁵ Represents the available daylight hours to complete the building assessments in 27 days. Three days are lost due to deployment time (mission hours – deployment hours = available hours).

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County	Buildings ⁷	Damage Assessment Teams' Days
Audrain	108	4.32
Bollinger	1289	51.56
Boone	942	37.68
Butler	5219	208.76
Calloway	879	35.16
Camden	467	18.68
Cape Girardeau	14293	571.72
Carter	433	17.32
Cole	1081	43.24
Cooper	62	2.48
Crawford	129	5.16
Dent	606	24.24
Douglas	74	2.96
Dunklin	7293	291.72
Franklin	1333	53.32
Gasconade	190	7.6
Howard	404	16.16
Howell	691	27.64
Iron	926	37.04
Jefferson	3576	143.04
Laclede	210	8.4
Lincoln	669	26.76
Madison	705	28.2
Maries	54	2.16
Miller	978	39.12
Mississippi	2817	112.68
Moniteau	187	7.48
Montgomery	599	23.96
Morgan	668	26.72
New Madrid	3802	152.08
Oregon	657	26.28
Osage	32	1.28
Ozark	74	2.96

⁶ Assumes two people per damage assessment team.

⁷ This number is derived from MAE Center, Building Damage by Count by General Occupancy. Only Moderate, Extensive, and Complete Damage Building Numbers were used.

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Pemiscot	3973	158.92
Perry	1047	41.88
Phelps	202	8.08
Pike	295	11.8
Pulaski	206	8.24
Reynolds	373	14.92
Ripley	1463	58.52
St. Charles	5093	203.72
St. Francois	3493	139.72
St. Louis/City of St. Louis	25490	1019.6
Ste. Genevieve	1087	43.48
Scott	9432	377.28
Shannon	497	19.88
Stoddard	8604	344.16
Texas	140	5.6
Warren	511	20.44
Washington	1313	52.52
Wayne	1619	64.76
Wright	460	18.4
Total Requirement	1167452	4669.8
Teams Required to complete in 27 days		172.96
State Provided		50
Support Requirement		122.96

Table C5-4 lists anticipated requirements to sustain life during the first three days following the incident.

Table C5-4 Estimated Critical Needs of Populations in the Affected Area during First Three Days

Resource	Day 1	Day 2	Day 3	3 Day Total
Potable Water Service Needed (liters)	90,222	90,222	2,526,006	2,706,450
Food Service Needed (shelf-stable meals)	57,702	57,702	1,684,004	1,804,300
Ice Needed (pounds)	230,808	230,808	6,736,016	7,217,200
# of households without water	123,719			
# of households without electrical power	302,173			
Displaced individuals (average 2.7 per household)	842,002			
# of people requiring emergency shelter	30,074		237,991	Total Capacity 907,303

# of pets (dogs and cats) requiring shelter			129,191	
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1.1 Purpose

The purpose of OPLAN Annex C is to provide ESF-specific information for the OPLAN—to identify gaps, enhance unity of effort, and link existing plans. Annex C provides the SEMA and FEMA Operation Section Chief with the basis for evaluating and accepting or redirecting mission assignments and tasks received from FEMA or other ESFs in response to an earthquake event in the NMSZ. Annex C also provides operational concepts unique to a catastrophic earthquake event planning and response, and assigns responsibilities to state and federal agencies to meet the needs of local governments following a catastrophic earthquake event.

This ESF-5 appendix to Annex C details ESF-5’s organization, course of action, and limitations in executing its assigned roles and responsibilities during a NMSZ incident.

Objective: Establish incident organization and coordination.
Objective: Conduct initial damage and safety assessment of affected areas.
Objective: Maintain continuity of local government within the affected areas

1.2 Considerations

General considerations are included in Section 1.5 of the Base Plan. The following considerations are ESF-5 specific:

- Life saving and life sustaining efforts will be the primary mission of disaster operations.
- Specialized life saving assistance associated with search and rescue (S&R) will be a priority, including light and heavy structural, waterborne, and inland wilderness S&R operations.
- Local governments likely will be unable to provide an organized and sufficient response to the damage of an earthquake.
- The magnitude of the event will overwhelm state and local government resources.
- The State of Missouri as normally organized for routine local disasters likely will be unable to respond within the affected area, and therefore will establish additional levels of command to ensure an adequate and organized response.
- With the greatest regard for the authority vested in local jurisdictions, a State Unified Command (UC) and several SACCs will be implemented to support ESFs in the affected area.
- The State of Missouri will fully utilize or commit its resources for response prior to seeking federal or sister state support through the Emergency Management Assistance Compact (EMAC).
- A detailed Common Operating Picture (COP) will not initially be available.
- The SEOC, Regional Response Coordination Center (RRCC), and Joint Field Office (JFO) will remain operational through the response phase of the event.
- FEMA will fully employ a Tactical Field Organization in accordance with the NIMS/ICS methodology, to include Mobilization/Incident Staging Bases (ISB), Branch Offices, and Division Supervisors.

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- This incident will involve a regional response, including support and resources from, and potential impacts to, neighboring states and multiple federal regions.
- Memorandums of understanding (MOU), Memorandums of Agreement (MOA), EMAC agreements, and mutual aid agreements among neighboring states and neighboring counties will be used to provide initial response assistance.
- Federal agencies will initiate response operations based on their agency authorities before the State requests a Presidential Declaration.
- The President may issue a Major Declaration prior to the request of the Governor.
- State and federal agencies will coordinate private sector, nongovernmental, volunteer, and donations activities during response and recovery operations.
- Media response will be significant and extensive.
- Some people directly threatened by the emergency may ignore, be unaware of, or not understand communications issued by local and state officials.
- Functional needs groups will require substantial assistance by local, state, and federal response.
- Potential first responders and emergency management personnel may be victims of the event.
- Other co-incident events in the State will not impact the execution of this plan but may cause a competition for state and federal resources.
- No single organization in the State of Missouri has sufficient resources to provide adequate emergency management services. Therefore, emergency management authorities will use all available resources, including federal, state, local, private, and volunteer organizations.
- Local governments' emergency management, continuity of government (COG), and damage assessment capabilities will draw from the same resources. This will result in competing priorities among these response areas for personnel and equipment resources.
- Some geographic areas may be isolated due to infrastructure damage (i.e., communities within the Missouri "Bootheel") making it imperative that all stakeholders, federal, state, and local are prepared to respond and act.
- Ability to mobilize resources will exceed capability to manage operations.

1.3 Assumptions

General assumptions are included in Section 1.6 of the Base Plan. The following assumptions are ESF-5 specific:

- State and local governments, departments, agencies, and offices must be prepared to operate without help for at least 96 hours.
- The Governor will declare a State of Emergency and request a Presidential Disaster Declaration.
- In a disaster emergency, outside assistance could be interrupted or unavailable.
- Local governments may be limited to provide direction and control resources to respond to catastrophic incident and disaster conditions.
- Additional staff and trained emergency personnel will be needed to support the expansion of a single UC and at SACCs.

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- The President will be issued a Major Declaration before completion of a detailed assessment to avoid needless human suffering.
- Local jurisdictions may require assistance to initiate damage assessment.
- Damage will be widespread over various regions of the State. The Federal Government will assist in the assessment of damages beyond the role of Preliminary Damage Assessment (PDA) of non-catastrophic disaster events.
- Federal, state, and local officials are aware of their responsibilities and respond as directed in this OPLAN, SEOP, and Local Emergency Operations Plans (LEOP).
- The Federal Government will respond and “push” commodities, resources, equipment, and teams into non-affected areas prior to the State’s request. Note: All “push” items will remain in the Federal Distribution Center and ISBs until requested

1.4 Limiting Factors

- Damage to main transportation routes into the affected areas will impact all response operations.
- EMAC or federal response teams will require forward logistical support that may not be established for 72 hours or more.
- State and federal capabilities will be quickly overwhelmed due to the number of jurisdictions needing assistance. State resources will be deployed from all across the state. Federal resources will be requested by all states affected by the earthquake.
- Public and private communication resources in the affected area will be severely impacted.
- Assistance from resources outside the affected areas and federal teams will take time to mobilize.
- A significant number of ESF-5 resources will be immediately or indirectly affected by the incident, which will most likely cause some added delay in staffing ESF-5 positions.
- No uniform system will be in place to provide access control at perimeters, including credentialing and access verification for first responders.

2.0 Mission

The mission of the UC, consisting of all state, federal, and non-governmental organizations (NGO), will be to provide support for life saving, life sustaining, and other resources necessary to supplement local, regional, private-sector, nonprofit, nongovernmental, and volunteer agency activities immediately following a catastrophic earthquake in this area of the State of Missouri, and to lessen the consequences of an earthquake and enhance recovery of the affected areas.

Mission-essential tasks are as follows:

- Provide for the safety of all response/emergency management personnel.
- Provide life saving and life sustaining resources.
- Articulate and communicate a clear command, control, and coordination structure for delivery and distribution of resources.
- Release emergency public information that ensures accurate/adequate communication to the public from all response agencies.
- Ensure continuity of operations and COG are specified and will be implemented.

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases of response within specified periods of time. A description of these Phases is in Section 3.3 of Annex C – Operations. Table C5-5 lists the (sub)phases of Phase 2 (Phases 2a, 2b, and 2c).

Table C5-5 Response Phase Operational Periods

Response Phase	Operational Period
2a – Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Employment/Sustained Response	E + 72 – E + 120 hrs +

The phases of response and operation are designed to be flexible, as the complexity of the incident will determine actual phases/periods.

3.1 Concept of Operations

3.1.1 General Concepts

Immediately upon a verified Moment Magnitude (M_w) 6.5 or greater earthquake, all state departments and agencies will be placed on an alert status. These entities will begin verification; communicate telephone alerts to personnel who will staff the SEOC, RRCC, or SACC (if established); and identify all terrain transportation assets to support movement of personnel to the affected area. The mobilization locations and safety instructions for responders will be the responsibility of each agency.

3.1.1.1 Mobilization

- Initial response will come from the Initial Response Tier of the State (Regions B, F, I, G—see Base Plan Figure BP-9, Response Tiers for details).
- Resources in the support tier (Regions H, A, D) will remain in place (unless otherwise directed via provisions in this OPLAN) to support replenishment of initial responding resources as the incident progresses. Some resources will require replenishment or replacement as early as day 7 of the event, others at days 14, 21, 28, etc., and then may be recycled back into response depending on the resource type.
- Response and resources in the affected area (Regions C and E) will be applied to the immediate needs of the incident until the time they can return to near normal operations and begin response locally.
- MoDOT and SEMA will be prepared to move to staging areas or airports and wait for helicopter or small aircraft transport to their respective target locations.
- Effective mobilization of state resources requires coordination with the UC to ensure safe routes and availability of coordinated modes of transportation before departures to the affected area. It also requires that each department organize and account for personnel and resources in a reception area outside of the affected area prior to movement. In cases of staff mobilizing to support SACCs, if established, departments may be directed to report to reception areas or other locations announced at the onset of the disaster, and then each moves to its area of responsibility

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as a team. If land routes are not passable, this would be required to coordinate movement by air (helicopter) to the coordination center locations.

- Mobilization of federal personnel to the RRCC will commence under coordination of FEMA Senior Leadership. In addition, the Missouri Liaison Officer and the Type II IMAT will be instructed to report directly to the Missouri SEOC.
- The Federal Government will establish the Mobilization Center and ISBs to support the initial “push” and “pull” of commodities, resources, equipment, and teams in anticipation of a request.

3.1.1.2 Staging

- Staging areas for response and recovery resources will be established in the initial response within affected tiers of the State. Refer to Annex D for staging area maps. All state staging areas will be on state-owned or -leased property to ensure state control of those areas, as well as to avoid conflict with local resources required to support local plans and efforts.
- Staging areas are delineated into the two categories of responder and victim, and should not be co-located or combined at the same site; however, each pair of responder and victim staging areas will be located within the same city or county.
- All federal assets, resources, commodities, and teams will move through one or more of the ISBs, and will remain until directed to move to the tactical field location by the Operations Section Chief.
- Departments are responsible for providing reasonable accommodations (food and lodging) for responders deployed for a minimum of 14 to 28 days. Operational Areas will assist with contracts for local hotels, food service, property rental/lease, and other services.
- Local jurisdictions are responsible for identifying Points of Distribution (POD); if those sites are in conditions unsuitable for occupation or staffing, the State will work with local jurisdictions and volunteer organizations to staff and begin the distribution process.

3.1.1.3 Response

- At the onset of a catastrophic incident, it will be necessary to rapidly expand the size and scope of state-level operations focused on response. It will also be paramount that these operations are synchronized through the SEOC and RRCC. The sizes and locations of SACCs will depend on actual damage rather than assumptions or predictions within this OPLAN. Initially, “air lifting” resources into the affected area may be required, and air bridging to available airfields may be the primary mode of transport to the affected area. If and when response by ground via ingress routes is available, this will be utilized. The number one priority at the onset of a verified M_w 4.5 or greater seismic event is that the State Government must take steps to assess and organize a response capable of movement via ground, but also must be able to change plans to movement via air from one of the airfields listed in Appendix 4 and Appendix 14 of Annex C.
- Concurrently with air assets providing life saving and sustaining missions, the Federal Government will work in conjunction with MoDOT to hastily establish ingress and egress routes for, at least, rough terrain vehicles to initiate ground transport of commodities and resources into the affected area.
- The priority of air missions will be to support implementation of S&R teams, medical personnel, and medical resources.

3.1.1.4 Recovery

- Recovery processes may be interrupted by subsequent aftershocks. In the event of aftershocks, the concept of operations will reset to phase 2a, Immediate Response. Because response personnel can become victims, additional resources may be required to respond to the subsequent damage.
- Federal resources not assigned will return to the ISB and remain until re-tasked. The Federal Operations Section Chief has sole responsibility to release federal assets and resources, except for national assets and teams.
- If subsequent aftershocks occur, response and recovery activities may proceed concurrently.
- Federal resources will remain under the tactical control of the FEMA Branch Director until Mission Complete; then these revert to the ISB and Operation Section Chief (OSC) control.
- Recovery efforts will be resource intensive and will last longer than any recovery historically known to the emergency management community. Local and state agencies will coordinate the return of citizens to the affected area when infrastructure has been safely restored, which could take months and possibly multiple years.

3.1.1.5 De-Mobilization

- Resources with unassigned missions in state staging areas will remain under the control of the SACC until release has been coordinated with the SEOC.
- Resources may be assigned from one SACC to another SACC depending on the duration of their deployment.
- When resources are no longer required in the statewide effort, these will be released under the ICS demobilization process following the authority and process under which they were mobilized (i.e., State Fire Mutual Aid system, Law Enforcement Mutual Aid, etc.).

3.1.1.6 Evacuation

All large-scale evacuations will be overseen by the Evacuation Management Team (EMT) from the SEOC. The EMT is a multidisciplinary team that can support the evacuation efforts, make recommendations to UC, and coordinate with local jurisdictions. The composition of the EMT is listed in Table C5-6. The EMT will be actively engaged in assessing the impact to jurisdictions and developing a course of action for evacuation operations.

Table C5-6 Evacuation Management Team Composition

Agency Represented	ESF
Missouri Department of Public Safety	ESF-13
Missouri Public Information Officer	ESF-15
Missouri State Emergency Management Agency	ESF-5
Missouri Department of Natural Resources	ESF-10
Missouri Department of Transportation	ESF-1
Missouri Voluntary Organizations Active in Disaster	ESF-6
Missouri Department of Social Services	ESF-6
Missouri Department of Health and Senior Services	ESF-8

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Missouri State Highway Patrol	ESF-13
Missouri National Guard	N/A
Missouri Department of Mental Health	ESF-6

Localized evacuation will be the responsibility of the local jurisdiction. Once a regional evacuation has been implemented by the EMT, the overall concept of operations will follow that outlined in the ESF-6 appendix to this annex. Throughout this process, the EMT and the local Emergency Management Directors (EMD) will coordinate efficient deployment of resources, utilization of available evacuee shelter capacity, and effective modifications to evacuation routes. The NMSZ Evacuations Plan should be used to guide evacuation activities.

3.1.2 Phased Response Concepts

3.1.2.1 Phase 2a: Immediate Response

DIRECTION AND CONTROL

Purpose of Phase

All EOCs in the affected area will activate if safe to do so. The SEOC will activate along with FEMA's RRCC to provide an effective and coordinated effort to support emergency responders and ESFs in the affected and non-affected areas.

End State of Phase

The SEOC and FEMA's RRCC will be activated, and most local EOCs will be activated. Staging areas will be identified, and deployment of assets and resources to affected areas will begin. The SEOC will act as the clearinghouse for all information and damage assessments, and will communicate effectively with FEMA's RRCC.

Local Mission-essential Tasks – Direction and Control

1. Activate Local Emergency Operations Plans (LEOP).
2. Activate local EOCs and support local emergency responders in the field.
3. Act as the central point of contact for critical information including loss of lives, number of injuries, damage assessment, damage to critical infrastructure, loss of government services, and loss of critical public and private services.
4. Disseminate critical information to SEOC.
5. Prepare list of critical resources needed to stabilize and terminate the emergency.

State Mission-essential Tasks – Direction and Control

1. Verify occurrence of the earthquake. If the M_w is 6.5 or greater, activate the SEOC. Once activated, the SEOC is the coordinating point for all state response and recovery activities.
2. Initiate SEOC; mobilize units in Regions B, F, I, and G.
3. Execute pre-scripted Executive Orders, Disaster Declaration requests, and EMAC requests.
4. Develop an Information Collection Plan (ICP) for acquiring incoming information, some of which will underlie a rapid needs assessment.
5. Develop a state Incident Action Plan (IAP) with input from other ESF Coordinators.

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6. Activate all state resources (listed in plans) as needed to save lives, protect property, and stabilize conditions following onset of the incident.
7. Establish communications with the FEMA RRCC and begin coordinated response efforts.
8. Activate EMAC to request mutual aid.
9. Coordinate the request for Temporary Flight Restrictions (TFR) from the Federal Aviation Administration (FAA).
10. Coordinate provision of services, equipment, and supplies to support expedient operations associated with an earthquake disaster; coordinate approval and acquisition of equipment and supplies that, following an earthquake, are not available through normal purchasing channels and within usual ordering time frames.
11. Activate the EMT (see Evacuation Plan).
12. Decide if SACCs should be activated.
13. Identify and staff the various SEOC positions.

Federal Mission-essential Tasks – Direction and Control

1. Activate RRCC and establish contact with SEOC.
2. Deploy the Missouri LNO to the Missouri SEOC.
3. Deploy Type II IMAT to the Missouri SEOC.
4. Request the Mobile Emergency Response Support (MERS) detachment.
5. Activate support agencies for U.S. Army Corps of Engineers (USACE), U.S. Coast Guard (USCG), National Parks Service, and U.S. Department of Defense (DOD).
6. Activate federal S&R resources to assist in the affected area as requested.
7. Issue applicable pre-scripted Mission Assignments.
8. Complete a Joint IAP with the State once the IMAT is in place to provide command and control of federal operations.
9. Provide guidance and ensure controls are in place to protect responders and the public.
10. Provide situational awareness including modeling of current and forecasted impacts.
11. Ensure a COP through information sharing and coordination with the SEOC.
12. Establish a sustainable joint communication capability with federal, state, and local officials, and be prepared to support joint state/federal representation.
13. Develop/implement a joint public information plan with federal, state, and local officials for timely and accurate information exchange.
14. Provide resources and equipment at critical facilities in accordance with state priorities.

DAMAGE ASSESSMENT

Purpose of Phase

Establish statewide responsibilities for collecting, reporting, and analyzing damage information to support local, state, and federal response and recovery operations. Rapid, accurate damage assessment and incident analysis are key elements of any effective disaster response. Damage assessment allows officials to effectively allocate resources in order to maximize effectiveness.

End State of Phase

This phase terminates with activation of Damage Assessment Teams and commencement of deploying those teams to the affected areas

Local Mission-essential Tasks – Damage Assessment

1. Develop the initial situation report containing preliminary estimates of damage once information is received from responders.
2. Conduct a damage assessment of the affected area in an attempt to determine the magnitude and overall impact of the event, the dollar loss, and local response actions.
3. Activate Damage Assessment Teams and start to deploy those teams into the affected areas.
4. Conduct damage assessments of critical government services, facilities, and infrastructure along with critical resources, such as water, utilities, communications, hospitals, nursing homes, etc.
5. Act as the central point of contact for critical information including loss of lives, number of injuries, damage assessment, damage to CI/KR, loss of government services, and loss of critical public and private services.
6. Request outside assistance before local resources are overwhelmed.
7. Forward situation reports (SITREP) to the SEOC regarding current circumstances in the affected area. Because the purpose of SITREPs is to update disaster status continually, the reports should contain the following information:
 - a. Location and nature of damage.
 - b. List of damages by category (on standard state damage assessment forms).
 - c. Socioeconomic impacts.
 - d. Response actions by local jurisdictions.
 - e. State and federal assistance needed.
8. Direct further damage assessment activities by organizing Damage Assessment Teams to survey the area as needed.
9. Update the SEOC/SACC on a timely basis. Critical updates should be disseminated immediately. Prepare list of critical resources needed to stabilize and terminate the emergency.

State Mission-essential Tasks – Damage Assessment

1. The damage assessment process begins with verification of an MM/M_w 6.5 or greater seismic event.
2. Establish situation monitoring activities at the SEOC upon notice that a potentially damaging disaster has occurred.
3. Immediately assess CI/KR for response resources (roads, bridges, incident command and control sites, staging area sites, communications systems, etc.).
4. Request the following information in damage reports:
 - a. Location and nature of damage.
 - b. List of damages by category (roads, bridges, structures, communication facilities, etc.).
 - c. Injuries and fatalities.

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- d. Response capabilities of local jurisdictions.
5. Provide raw damage assessment information to the Situation Unit under the SEOC Planning Section, and direct them to refine the raw data into information useful for effective management decisions. The following actions must occur:
 - a. Monitor input from various collectors and overall mission management.
 - b. Analyze acquired information to identify significant trends. Develop draft recommendations of response priorities.
 - c. Disseminate information in a variety of reports and through the media via the PIO.
 - d. Provide information to all persons with operational needs quickly enough for them to undertake appropriate and timely actions.
6. Direct the local jurisdictions to report damage using the following platforms, in this sequence: phone email, fax, and radio. If unable to contact the SEOC directly, forward the information to the MSHP, which will forward the information to the SEOC.
7. Provide damage assessment information to the Unified Coordination Group (UCG) to facilitate creation of a joint IAP.
8. Request assistance from MONG and the Missouri Information Analysis Center (MIAC) as needed.
9. Organize state damage assessment personnel (survey teams) to assess and enhance local efforts.
10. Alert participating state agencies that damage assessment operations are to occur.
11. The SEOC may choose to dispatch a state on-site representative instead of a damage survey team. The on-site representative gathers information necessary to determine the severity of the disaster and for deciding whether state damage assessment teams are needed. After establishing on-scene liaison with local authorities, the SEMA representative furnishes essential information to the SEOC. If warranted, the representative remains at the disaster scene to coordinate state damage assessment teams when they arrive.
12. Begin preparation for on-site, preliminary damage assessment with FEMA. Appropriate county and city personnel should accompany the federal and state damage survey teams and participate in the survey.
13. Start planning for damage assessments of private property (individuals, residences, and businesses), and of public facilities (infrastructure).

Federal Mission-essential Tasks – Damage Assessment

1. Provide situational awareness, including modeling of currently forecasted impacts.
2. Direct ESF agencies and departments to assess the CI/KR Sectors within the State.
3. Request remote sensing of damages from the National Response Coordination Center (NRCC).
4. Maintain a common operating picture of damages within the affected area.
5. Implement Mission Assignments to facilitate damage assessments.
6. Assess CI/KR and utilities, and maintain awareness of restoration.
7. Direct ESF agencies and departments to determine the status of federal facilities and infrastructure in the affected area.

8. Assess state and local infrastructures to determine priority of response and restoration.

CONTINUITY OF GOVERNMENT

Purpose of Phase

Local, state, and federal agencies along with private sector partners will activate to provide a unified approach to restore local governments so these can continue to operate during and after the incident.

End State of Phase

The local government and State and Federal Governments can continue to provide essential functions.

Local Mission-essential Tasks – COG

1. Activate COG plans if available.
2. Coordinate with ESF-15 to implement the crisis communication plan, and work with state and federal agencies to disseminate vital information concerning government services.
3. Select alternate secure, protected facilities and sites from which essential personnel can carry on their functions during the emergency period.
4. Identify, select, and protect records essential to governmental functions that include automated technology data.
5. Report damage and activities to SEOC.
6. Maintain interoperable communications with all identified essential internal and external organizations, critical customers, and the public.

State Mission-essential Tasks – COG

1. Serve as the collection point for COG information.
2. Direct responders to secure protected facilities and sites from which essential personnel can carry on their functions during the emergency period, and that are not affected or are only somewhat affected by the incident.
3. Assist local government in locating sufficient space and equipment to sustain the relocating organization.
4. Coordinate with ESF-15 and the communications teams to assist local governments in disseminating vital information concerning government services.
5. Provide support and resources so local governments can restore critical functions/services.
6. Act as the executive office implementing administrative decisions about directing and coordinating response and recovery activities if required.

Federal Mission-essential Tasks – COG

1. Direct ESF-15 to assist state and local governments in disseminating vital information concerning government services.
2. If requested, develop and implement a mission to provide emergency communication to temporary public facilities in order to support restoration of state and local government functions.
3. Provide technical assistance as requested by the State of Missouri to support restoration of government functions.

4. Develop and implement a mission to establish emergency communications and temporary facilities in order to restore functions of the Federal Government.

3.1.2.2 Phase 2b: Deployment

DIRECTION AND CONTROL

Purpose of Phase

Emergency management will continue to identify and deploy resources to the affected areas as more areas become accessible to assist emergency response operations.

End State of Phase

Assets and resources are properly deployed and can continue to meet the needs of the emergency responders and affected population.

Local Mission-essential Tasks – Direction and Control

1. Furnish incident status reports to state officials.
2. Maintain records of all emergency operations.
3. Continue to provide situation updates and damage assessment data to SEOC.
4. Assess the need for additional resources and request them from the SEOC.
5. Coordinate emergency operations with arriving responders.

State Mission-essential Tasks – Direction and Control

1. Continue to gather essential elements of information according to the ICP.
2. Verify, analyze, and develop reports that provide common operating picture.
3. Provide situational awareness and deployment requirements for lifesaving response teams.
4. Develop joint IAP with input from ESF Coordinators and FEMA.
5. Coordinate location of the JFO with FEMA.
6. Post reports to the designated reporting system.
7. Prioritize key locations/activities that need emergency management operations.
8. Coordinate with ESF-7 provision of services, equipment, and supplies to support expedient operations associated with an earthquake disaster; coordinate approval and acquisition of equipment and supplies that, following an earthquake, are not available through normal purchasing channels and within usual ordering time frames.
9. Continue to task regional and state resources to support operations in the affected area.
10. Establish and/or develop maps, diagrams, charts, displays (situational awareness tools).

Federal Mission-essential Tasks – Direction and Control

1. Continue immediate lifesaving operations to include evacuations and S&R.
2. Deploy MERS detachment.
3. Provide life saving and life sustaining support to the impacted area, including shelter, mass care, medical facilities.
4. Coordinate provision of services, equipment, and supplies to support expedient operations.

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5. Provide resources and equipment at critical facilities in accordance with state priorities.
6. Continue to ensure a COP in coordination with the State of Missouri.
7. Continue to provide situational awareness, including modeling of current and forecasted impacts and remote sensing.
8. Develop/implement a joint public information plan with federal and state officials' approval to enable timely and accurate information exchange.
9. Continue to work with local and state agencies to assess critical infrastructure and utilities, and maintain awareness of restoration.
10. Continue to implement field tactical operations to further develop the command and control elements of the joint response. Implement the Branch Director and Division Supervisor concept.
11. Continue to provide guidance and ensure controls are in place to protect responders and the public.
12. Continue to establish the JFO and tactical field operations facilities.

DAMAGE ASSESSMENT

Purpose of Phase

Continue damage assessment for the affected area by obtaining, reporting, and analyzing damage information to support local, state, and federal response and recovery operations. Continue to identify and deploy resources to the affected areas as more areas become accessible in order to continue to assess damage to the affected areas.

End State of Phase

Assets and resources are deployed to meet the needs of the emergency responders and affected population.

Local Mission-essential Tasks – Damage Assessment

1. Continue to deploy Damage Assessment Teams into the affected area to assess damage to government services, infrastructure, and critical facilities.
2. Work with state and federal Damage Assessment Teams to ensure the effective and accurate accounting of damage to the area.
3. Continue to update the SEOC on a timely basis. Critical updates should be disseminated immediately. Prepare a list of additional critical resources needed to stabilize and terminate the emergency.
4. Forward SITREPs to the SEOC to apprise personnel of the current status of the situation. Because the purpose of SITREPs is to update disaster status continually, the reports should contain the following information:
 - a. Location and nature of damage.
 - b. List of damages by category (on standard state damage assessment forms).
 - c. Socioeconomic impacts.
 - d. Response actions by local jurisdictions.
 - e. State and federal assistance needed.

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5. Direct further damage assessment activities by organizing Damage Assessment Teams to survey the area.

State Mission-essential Tasks – Damage Assessment

1. Review PDA reports provided by the local jurisdiction, and task state or joint state-federal assessment teams to visit the affected areas.
2. Review and analyze the effects of the potential hazards.
3. Maintain increased readiness status until either response begins or the situation returns to normal.
4. Deploy SEMA on-site representatives or state PDA Teams to the affected areas.
5. Request joint state/federal PDA teams to survey damaged areas where damage is evidently beyond state and local response capabilities.
6. Deploy PIBITs.
7. Activate and deploy the SAVE Coalition.
8. Activate and deploy Civil Air Patrol (CAP).
9. Continue to obtain and analyze damage information. Indicate damaged areas on maps at the SEOC.
10. Maintain a list of damaged critical facilities requiring priority repairs.
11. Coordinate with ESF-15 to develop public information releases about unsafe areas.
12. Collect and consolidate initial damage assessment reports provided by local jurisdictions.
13. Prepare consolidated damage assessment forms for use in recovery phase.
14. Task the Operations Branch with oversight of damage assessments in the affected area.
15. Assess damage to state-owned buildings and grounds, correctional institutions, public utilities, school facilities, health care facilities, water services, and transportation systems.

Federal Mission-essential Tasks – Damage Assessment

1. Provide situational awareness, including modeling of current forecasted impacts.
2. Maintain a COP of damages within the affected area.
3. Assess critical infrastructures and utilities, and maintain awareness of restoration.
4. Assess state and local infrastructures to determine priority of response and restoration.

Continuity of Government

Purpose of Phase

Conduct damage assessment for the affected areas by obtaining, reporting, and analyzing data on losses of government assets and services. Continue to identify and deploy resources to the affected areas as more areas become accessible to continue to assess damage to the affected areas and assist local government in restoring government services.

End State of Phase

Assets and resources are properly deployed and continue to meet the needs of the emergency responders and affected population.

Local Mission-essential Tasks – COG

1. Continue to work with state and federal agencies to disseminate vital information concerning government services.
2. Continue to assess the new protected facilities and sites from which essential personnel can carry on their functions during the emergency period.
3. Continue to protect records essential to governmental functions that include automated technology data.
4. Continue to report back to SEOC to update progress.
5. Continue to assess the health, safety, and emotional well-being of relocated employees.

State Mission-essential Tasks – COG

1. Continue to act as the collection point for COG information.
2. Continue to support local governments to continue and/or restore local government services.
3. Continue to utilize EMAC to request mutual aid.
4. Continue to assess the situations in each jurisdiction and provide support and resources so local governments can restore critical functions/services.

Federal Mission-essential Tasks – COG

1. Continue to assess the situations in each jurisdiction and provide support and resources so local governments can restore critical functions/services.
2. Continue to provide critical communication and emergency facilities to support restoration of government functions.
3. Continue to provide technical assistance as requested by the State of Missouri to support restoration of government functions.

3.1.2.3 Phase 2c: Employment/Sustained Response

DIRECTION AND CONTROL

Purpose of Phase

Continue to identify and deploy resources to the affected area as more areas become accessible.

End State of Phase

Continue to direct and control resources and resources. Continue to respond to the needs of the affected areas and start recovery efforts where appropriate.

Local Mission-essential Tasks – Direction and Control

1. Continue to assess damage and report those damages to the SEOC.
2. Continue to assess needs and make requests to the SEOC.

State Mission-essential Tasks – Direction and Control

1. Continue to monitor and assess the situation and support local responders to stabilize the incident.
2. Request FEMA to activate additional specialized resources as needed.

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3. Monitor the status of active mission assignments, and move from rescue missions to recovery missions as needed.
4. Continue to provide mission support as needed.
5. Provide reports and information to senior leadership as requested.

Federal Mission-essential Tasks – Direction and Control

1. Continue to provide resources and equipment at critical facilities in accordance with state priorities.
2. Continue to provide guidance and ensure controls are in place to protect responders and the public.
3. Continue to provide situational awareness including modeling of current and forecasted impacts.
4. Ensure a COP on coordination with SEMA.
5. Continue to assess CI/KR and utilities, and maintain awareness of restoration.
6. Continue to monitor and assess the situation and support local responders to stabilize and recover from the incident.
7. Monitor the status of active mission assignments, and move from rescue missions to recovery missions as needed.
8. Continue to provide mission support as needed.
9. Provide reports and information to senior leadership as requested.

DAMAGE ASSESSMENT

Purpose of Phase

Continue to assist emergency responders by providing updated damage assessments in the affected area.

End State of Phase

Continue to provide updated damage assessments in the affected area, and continuously provide this information to the SEOC.

Local Mission-essential Tasks – Damage Assessment

1. Continue to assess damage and report those damages to the SEOC.
2. Continue to assess needs and make requests to the SEOC.

State Mission-essential Tasks – Damage Assessment

1. Continue to provide situational awareness including modeling of current and forecasted impacts.
2. Continue to assess critical infrastructure and utilities, and maintain awareness of restoration.
3. Continue to coordinate communications with local and federal agencies.
4. Request FEMA to activate additional resources.
5. Monitor the status of active Damage Assessment Teams, and support those teams in the affected area.
6. Continue to provide mission support as needed.
7. Provide reports and information to senior leadership as requested.

Federal Mission-essential Tasks – Damage Assessment

1. Continue to provide guidance and ensure controls are in place to protect responders and the public.
2. Continue to provide situational awareness, including modeling of current and forecasted impacts.
3. Continue to assess critical infrastructure and utilities, and maintain awareness of restoration.
4. Continue to coordinate communications with state and local agencies.
5. Continue to monitor and assess the situation, and support state and local responders to recover from the incident.
6. Continue to provide mission support as needed.
7. Provide reports and information to senior leadership as requested.

Continuity of Government

Purpose of Phase

Continue to assist local governments by providing resources to assist them in restoring critical government services and functions.

End State of Phase

Determination is clear either that most local governments are operational and can provide critical services and some non-essential services, or damage to the local governments are so severe that they cannot continue to provide government services.

Local Mission-essential Tasks – COG

1. Continue to assess critical needs, resources, and facilities, and communicate resources requests to the SEOC.
2. Work with state and federal agencies to develop goals to be self-sufficient by a certain date, and relay those goals to the SEOC.

State Mission-essential Tasks – COG

1. Continue to act as the collection point for COG information.
2. Continue to support local governments to continue and/or restore local government services.
3. Continue to utilize EMAC to request mutual aid.
4. State PIOs and communications teams continue to assist local governments in disseminating vital information concerning government services.
5. Provide reports and information to senior leadership as requested.

Federal Mission-essential Tasks – COG

1. Continue to provide situational awareness.
2. Continue to assess the situation in each jurisdiction, and provide support and resources so local governments can restore critical functions/services.
3. Continue to provide technical assistance as requested by the State of Missouri to support restoration of government functions.
4. Continue to provide mission support as needed.

5. Provide reports and information to senior leadership as requested.

4.0 Oversight, Coordination, and Communications

4.1 Coordinating Agencies (Primary)

4.1.1 Local

Local Incident Command

4.1.2 State

Missouri State Emergency Management Agency

4.1.3 Federal

Federal Emergency Management Agency

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local law enforcement
- Local fire department
- Local Emergency Medical Services
- Non-governmental agencies
- Community Emergency Response Team

4.2.2 State

- Missouri Department of Conservation
- Missouri Department of Corrections
- Missouri Department of Transportation
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri State Water Patrol
- Missouri National Guard
- Missouri State Highway Patrol
- Civil Air Patrol
- Missouri Voluntary Organizations Active in Disaster

4.2.3 Federal

- U.S. Coast Guard
- Department of the Interior/National Park Service

- Department of Defense
- Department of State

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

EMAC offers state-to-state assistance during a governor-declared state of emergency (receiving state). During a NMSZ incident, it is assumed that EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operations is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Requests for EMAC and federal resources are both managed through SEMA. The following process will be utilized to activate EMAC resources for and into Missouri:

- The Governor of Missouri will declare a disaster.
- SEMA will open an EMAC event in the EMAC Operations System.
- Missouri will request resources based on mission assignment.
- The assisting state will detail available resources and estimated costs back to SEMA.
- SEMA will approve the resource and cost.
- The resource from the assisting state will mobilize and deploy.

For resources not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

Table C5-7 lists potential resources that may be requested for Missouri through the EMAC system from non-impacted states according to pre-incident agreement. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C5-7 Pre-scripted EMAC Request

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	Incident Command Support Personnel	
	State Emergency Management Waivers	
	State Emergency Operation Center Personnel	
	State Incident Management Teams	
	State Mobile Command Posts	

5.2 Pre-scripted Requests for Federal Assistance

Table C5-8 lists potential resources that may be requested through the Federal Government via FEMA Mission Assignments. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C5-8 Pre-scripted Action Request Form

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Administrator	SEMA		Federal Emergency Management Waivers		
	Administrator	SEMA		Inter-Agency Remote Sensing Coordination Cell		
	Administrator	SEMA	S	U.S. Environmental Protection Agency Airborne Spectral Photometric Collection Technology(ASPECT) aircraft	S	
	Administrator	SEMA		Incident Management Assistance Teams	S/P	
	Commissioner	MDPS		Mobile Emergency Response Support		

6.0 Operational Tools

6.1 FEMA Mobile Emergency Response Support Deployable Communications Resources

In response to regional requests for support, FEMA provides mobile telecommunications, operational support, life support, and power generation assets for onsite management of disasters. This support is managed by the Response and Recovery Directorate’s Mobile Operations Division. The Mobile Operations Division has a small headquarters staff and six geographically dispersed Mobile Emergency Response Support (MERS) and Mobile Air Transportable Telecommunications System (MATTS) detachments. MERS regional responsibilities are listed in **Table C5-9**.

Table C5-9 MERS Detachments and Their NMSZ Areas of Responsibility

MERS Detachment	Area of Responsibility
Thomasville, Georgia	FEMA Region IV
Frederick, Maryland	FEMA Region V
Denton, Texas	FEMA Region VI
Denver, Colorado	FEMA Region VII
Maynard, Massachusetts	To be determined
Bothell, Washington	To be determined

MERS detachments support disaster field facilities and local, state, and federal responders. MERS personnel and equipment are considered national assets and are deployed to support disaster-response activities. For the NMSZ incident, the Denton, Texas MERS Detachment has been assigned to FEMA Region VI. While the Denver, Colorado MERS is traditionally assigned to Regions V and VIII, the NMSZ scenario assigns the detachment to Region VII due to geographical proximity.

Each MERS detachment can concurrently support a large Disaster Field Office and multiple field operating sites within a disaster area. MERS is equipped with self-sustaining telecommunications, logistics, and operations support elements that can be driven or airlifted to the disaster location. Some MERS assets can be airlifted by C-130 military cargo aircraft. MERS is available for immediate deployment. As required, personnel and equipment deploy promptly and provide the following:

- Operational support for the ESF-5, Information and Planning
- Liaison to the FCO
- Logistics and life support for emergency responders
- Multimedia communications and information processing support for ESF-2, Communications
- Automated information and decision support capability
- Security (facility, equipment, and personnel) management and consultation.

Most equipment is preloaded or installed on heavy-duty, multi-wheel drive trucks. Some equipment is installed in transit cases.

6.1.1 Telecommunications

The MERS telecommunications function is accomplished using a variety of communications transmission systems including satellite, High Frequency (HF), and microwave line-of-sight (LOS) interconnected by fiber-optic cables to voice and data switches, local area networks (LAN), and desktop devices such as personal computers and telephones. Telecommunications can be provided for one or multiple locations within a disaster location. MERS telecommunications assets can be used to establish communications connectivity with the public telecommunications system or government telecommunications networks, to interconnect facilities within the disaster region, to wire austere facilities, and to install computer, telephone, and video networks. MERS provides the following telecommunications transmission capabilities:

- Kurtz-under (Ku) band satellite for quick connectivity that furnishes up to two T1 lines for telephones or data. International Maritime Satellite and American Mobile Satellite Corporation satellite terminals provide immediate single-voice channel capabilities.
- Microwave LOS transmission to connect to the public network, provide connection to other facilities, or extend communications.
- HF to communicate with local, state, and federal emergency centers via the FEMA National Radio Network and FEMA Regional Radio Network
- Very High Frequency (VHF) and Ultra High Frequency (UHF) for local radio communications.

6.1.2 Equipment

Initial communications support equipment includes:

- Land mobile radios
- ACU-1000s
- Tactical repeaters
- LOS equipment
- Satellite telephones
- Generators.

Five of the six MERS detachments have similar equipment capabilities, with the exception being the Frederick MERS responsible for integrating multiple urban search and rescue (US&R) teams and National Disaster Medical System teams. If airframes are available, equipment and support personnel could be deployed to a site such as the Federal Distribution Center within 12 to 16 hours. The ability to refuel generators depends on availability of fuel in the area or on the arrival of MERS tankers. Sustained communications support equipment includes:

- Multi-radio Vans (MRV)
- Mobile Emergency Operations Vehicles (MEOV)
- Emergency Operations Vehicles (EOV)
- Incident Response Vehicles (IRV).

Each detachment has two MEOVs, one IRV, and one MRV. The Denton and Thomasville detachments also have large-format EOVs. Assuming the equipment would be driven to the Federal Distribution Center or staging areas, two MEOVs, one IRV, one MRV, and other support equipment from the Denver Detachments could be at the disaster site within 16 hours of notification, with the equipment from the

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other detachments arriving within 72 to 96 hours. However, no additional attachments are expected to be available for deployment to Region VII. Included in all packages would be HF; deployable antenna towers; additional Land Mobile Radio (LMR) equipment (e.g., ACU-1000s, repeaters); fuel tankers; heating, ventilation, and air conditioning (HVAC) equipment; truck-mounted generators; and resources (e.g., furniture, computers, telephone switches) to support the initial setup of a JFO or other standalone facility. Personnel assets are as follows:

- Approximately 20 personnel in the Communications Section of each detachment
- Approximately eight Logistics personnel to support fuel tankers, generators, and HVAC equipment
- Personnel not required to drive vehicles to the area could fly to the disaster site and assist with the assessment of requirements as needed.

Equipment details are as follows.

- **Multi-radio Vans.** MRVs provide a means to communicate, via an assortment of transmission media, from a remote disaster, emergency or special event location. Via a Ku satellite link (two T-1s) into FEMA's switched network and Wide Area Network (WAN), and in conjunction with deployable phone switches and/or a MERS EOV, a MRV can extend voice, data, and videoconference service to several hundred disaster responders. The van can also provide radio cross-patching in the VHF, UHF, and 700/800-megahertz (MHz) ranges, as indicated below. In addition, the vehicle can support HF and LOS applications. MRV Ku band satellite capabilities are as follows:
 - Two simultaneous up/down links
 - MRV antenna, 2.4-m RSI four port
 - Up to two T1 circuits (48 uncompressed channels, which can be compressed into more than 200 phone trunks using a router and phone switch) available through the DHS satellite hub
 - Analog broadcast quality video up/down link
 - Deployable digital video conferencing system, which supports both H.320 ISDN OK as-is dialup and/or H.323 Internet Protocol (IP) conferencing

MRV radio characteristics are as follows:

- HF support: 1.6 to 29.999 MHz
 - VHF Lo band support: 30 to 88 MHz
 - VHF support: 100 to 174 MHz
 - UHF support: 225 to 512 MHz
 - 700-MHz support: 764 to 776 MHz duplex; 794 to 806 MHz TX only
 - 800-MHz support: 851 to 870 MHz duplex, 806 to 825 MHz TX only
 - Trunking support: 400 and 800 MHz (Motorola)
 - ORBACOM for UHF-VHF 700- and 800-MHz cross patching
 - RF modems: RF-3466A, HAL, and Threaded Neill-Concelman (TNC)
 - Deployable antennas available to enhance radio operations
 - 45-foot pneumatic mast with pan and tilt capabilities for antenna mounting platform
- **Mobile Emergency Operations Vehicles.** Each MERS detachment has two MEOVs. Each vehicle provides operational space to support approximately eight responders at a disaster scene. In conjunction with the MRV or other means for connectivity into FEMA networks, the Incident

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Commander (IC) or site commander at a remote, emergency, or special event location can obtain, process, and distribute critical information by voice, data, and video. These services can be extended and expanded into an adjacent facility to support several hundred responders. MEOV communications and information systems are as follows:

- On-board On-call Ku satellite system.
 - Cisco 2924 catalyst switch provides network connectivity inside the MEOV and a fiber-optic port to provide network connectivity beyond the MEOV.
 - Cisco 3640 modular capable of six T1 connections and a Fast Ethernet port to connect to the LAN.
 - Compaq Proliant dual processor server has 52 gigabytes of RAID storage capability and 1 gigabyte random access memory (RAM) running Windows 2000 for the LAN.
 - Lucent/Orinoco system provides wireless LAN communications using up to three wireless WaveLan antennas; system could support up to 120 wireless laptops/printers.
 - Avaya Prologix Telephone System capable of supplying 80 analog phone lines. It has a DS1 board to accept a T1 as a voice trunk line and a CO trunk card to accept individual POTS lines to be used as trunks. The Prologix switch also supports the SpectraLink wireless phone system, which is also analog.
 - Polycom Viewstation VS4000 provides video (H.323) that is displayed on a flat panel plasma screen.
 - Two SpectraLink 16 port analog master control units provide wireless voice communications.
 - SpectraLink and Wavelan antennas provide capability to establish the internal communications capabilities of the MEOV inside another facility.
 - Laurus fiber-optic shelf provides connectivity between subsystems.
 - Mitsubishi American Satellite Communications (AMSC) ST-251 satellite phone provides voice communication in the absence of the normal voice circuit. Satellite phone is also remote to the cab of the truck for mobile communication.
 - Digital Satellite Service (DSS) receiver provides satellite television capability.
 - Sony AMP/receiver; unit that switches between video, TV, VCR, and radio
- **Emergency Operations Vehicle.** The EOv provides the IMAT with a mobile operations and communications facility that can deploy along with the team and has a working area until a suitable JFO is established and operational. The EOv can serve the same purpose for the FEMA Director and other agencies. EOv communications and information systems are as follows:
 - Expanded work area with a telephone, computer, and modem connection at each work station
 - Copier, color printer, facsimile, automated display/briefing equipment, world time clocks, and two local and two satellite television receivers
 - Portable or MRV Ku band satellite transceiver providing telecommunications for the telephones
 - LAN and WAN connectivity and compressed video teleconferencing
 - HF radio with telephone interface
 - LMR system with 800 megahertz
 - UHF and VHF radios with telephone interface
 - MERLIN switchboard
 - Network file server.
 - **Incident Response Vehicles.** This vehicle serves as a forward extension of the IMAT coordinating federal assistance during disaster responses. The IRV is designed to deploy within 12 hours of notification and can begin operations within minutes after arrival onsite. The IRV and support vehicles are certified for airlift by military aircraft. The IRV is large enough to serve

as a small EOV and can be powered by either its onboard 20-kilowatt (KW) generator or external shore power. It also has a 42-foot, remote-operated extendable mast with zoom-capable camera, weather observation equipment, antennas, and airfield obstacle lighting. The IRV is equipped with critical system redundancy (including heat and air). IRV communications and information systems are as follows:

- On-board On-call Ku satellite system
 - ACU-1000 for UHF-VHF 700- and 800-MHz cross-patching
 - VHF support: 100 to 174 MHz
 - UHF support: 225 to 512 MHz
 - 700-MHz support: 764 to 776 MHz duplex and 794 to 806 MHz TX only
 - 800-MHz support: 851 to 890 MHz duplex and 806 to 825 MHz TX only
 - Satellite phones
 - HF 1.6 to 29.999 MHz
 - DSS satellite dish for monitoring commercial news broadcasts
 - Aircraft radio-commercial bands
 - Streaming video feed
 - IP phones
 - Video conferencing
- **Satellite phone equipment.** These terminals provide communications in remote areas or in locations with damaged communications infrastructure. MERS satellite terminals are as follows:
 - 8 AMSAT ST-141 (1 each per MRV, MEOV, QRS vehicle, QRS base, MERS Operations Center)
 - 5 GlobalStar terminals (packed in transit cases for transport)
 - 12 Iridium phones (4 each per MEOV; 4 packed in transit cases for transit)
 - 12 Inmarsat terminals (4 each per MEOV; 2 Datastars, 2 M4s, 2 Mini-Ms available for other deployments)
 - **Land Mobile Radio.** LMR equipment provides the ability for on-the-ground disaster responders to communicate among themselves and, depending on the frequencies authorized for use and/or the employment of interface equipment (e.g., Raytheon ACU-1000, MRV), with other response organizations and agencies. Communication can be either secure or non-secure. It should be noted that use of radio frequencies during disaster responses involves prior coordination with the appropriate agency frequency managers. Public Safety interoperable frequencies, available to US&R teams and National Disaster Medical System teams during emergency situations, are maintained by the National Telecommunications and Information Administration (NTIA). A current listing is available at http://wireless.fcc.gov/publicsafety/ncc/ncc_releases/NCCI-Och.pdf. LMR assets at each MERS detachment are as follows:
 - 60 VHF portables (Motorola XTS-5000R)
 - 36 UHF portables (Motorola XTS-5000R)
 - 1 VHF Quantar repeater
 - 1 UHF Quantar repeater
 - 1 Raytheon ACU-1000
 - **Frederick MERS resources.** Frederick MERS resources that could be used for US&R and National Disaster Medical System support include the following:
 - Four tower trailers outfitted with generator power and HVAC. Each unit has a 100-foot-tall tower and contains two 100-watt UHF repeaters along with VHF Lo band, VHF Hi band,

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UHF, and 800-MHz mobile radios. All are patched through a radio interoperability gateway. The units also contain multiple antennas for different configurations.

- Two 30-foot-long radio service trailers, outfitted with generator power and HVAC. Each unit is designed to service a “radio shop” in the field with spare connector cables, service monitors, and tools. The front section of the trailer also has an area for issuing equipment, as well as an LMR radio platform similar to the tower trailers with UHF repeaters and VHF Lo band, VHF Hi Band, UHF, and 800-MHz mobile radios. All are patched through a radio interoperability gateway. The units also contain multiple antennas for different configurations.
- Three radio warehouse trucks containing equipment to support field operations. The trucks contain UHF portable radios in kits (300 kits in each truck) along with spare batteries and chargers, clamshell battery packs, microphones, and other accessories. Each truck contains enough supplies to restore a LMR network, including rolls of coaxial cable, connectors, antennas, repeaters, radio modems, and mobile radios. Each truck also carries Iridium satellite phones, M4 phones, and Broadband Global Area Network (BGAN) satellite phones, as well as AMSC units.
- 2 MEOVs
- 2 satellite terminals
- Shelf stock packed in kits for deployment
 - Iridium phones
 - BGAN satellite phones
 - 35-watt UHF tactical radio repeaters
 - 35-watt VHF tactical radio repeaters
 - 100-watt UHF repeaters
 - 300-watt UHF repeaters
 - XTS-5000 UHF portable radios
 - XTL-5000 UHF mobile radios
 - Telephone switch with phones
 - 8 ACU units
- LMR support, primarily UHF, VHF, 800-MHz, and HF radio equipment
- Radio equipment packed in kits ready for shipment to special events.

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE
OPERATIONS PLAN**

**Annex C, Appendix C6
ESF-6 – Mass Care**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

The ESF-6 Appendix to the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for joint local, state, and federal mass care (sheltering, feeding, bulk distribution, and welfare information) and evacuation operations following a catastrophic earthquake in Missouri.

Under the Missouri State Emergency Operations Plan (SEOP), multiple state agencies are responsible for the functions within mass care and emergency human assistance. Specifically, mass care is addressed in Annex I of the SEOP. Annex I defines the roles and responsibilities of state departments, agencies, and organizations conducting mass care operations related to various incidents, including catastrophic events. Under Annex I, the Missouri Department of Social Services (MDSS) has the primary responsibility for the Emergency Support Function (ESF) – Mass Care, Housing and Human Services (ESF-6). The Humane Society of Missouri has the primary responsibility for pets, though not a state agency. The Missouri Department of Health and Senior Services (MDHSS) will provide support in providing functional needs support services (FNSS) in the provision mass care. Within the SEOP, Annex G, the Missouri Office of the Governor has the primary responsibility for evacuation. This includes establishment of a consistent operational methodology for all political subdivisions therein to plan for and implement regional, multi-jurisdictional evacuations, regardless of the geographic area in which they occur. Within Annex U, the Missouri State Emergency Management Agency (SEMA) has the primary responsibility to conduct donations and volunteer management. This includes establishing a satisfactory mechanism for channeling solicited and unsolicited donations and volunteer assistance from concerned citizens.

Under the National Response Framework (NRF), the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) is designated as coordinator and primary agency for ESF-6. At the federal level, ESF-6 provides a mechanism for coordinating mass care, emergency assistance, and housing and human services. In addition, ESF-6 coordinates delivery of federal mass care, emergency assistance, housing, and human services when local and state response and recovery needs exceed their capabilities. FEMA has also been designated the lead federal agency for evacuation, supporting the requests of the State.

While the Mid-America Earthquake (MAE) Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire State including the 47 counties recognized by the State as having a high potential to be negatively impacted by a seismic incident. This OPLAN also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties or the effects of aftershocks are provided unless noted.

The 22 MAE Center counties will be significantly impacted; this will result in displacement of a significant number of individuals. Of the 2,288,445 (2000 Census) individuals residing within the impacted area, 842,002 are expected to be “at risk” by day 3 post-impact. The “at risk” population is defined as displaced households (due to structural damage) and those without water and/or power for at least 72 hours. Additionally, by 72 hours post-incident, 237,991 individuals will require mass care and emergency human assistance. These individuals will depend on the systems established at the local, state, and federal levels, in conjunction with established non-governmental organizations. Table C6-1 lists the impacted population.

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Table C6-1 Impacted Population

Populations (72 hours post-incident)	Number
Total Impacted (22 counties)	2,288,445
Total “At Risk”	842,002
Total Shelter Seeking	237,991

Of the 237,991 requiring shelter, 55,640 individuals will have at least one functional need and will require specialized care. Approximately 140,891 individuals of that same population will require some degree of medical attention while residing in the congregate care shelter(s) for chronic illnesses as described in Table C6-2.

Table C6-2 Medical Conditions at General Population Shelters

Medical Condition	Number
Cancers	7,854
Diabetes	9,520
Heart Disease	19,515
Hypertension	33,795
Stroke	2,380
Mental Disorders	24,751
Pulmonary Conditions	43,076
Total Number of People with Medical Needs	140,891

Within the impacted area, seven hospitals with a total of 846 hospital beds exist and are assumed to be critically impacted during an earthquake. Out of an impacted population of 2,288,445, a total of 686 fatalities are projected in addition to 13,434 injuries, as shown in **Table C6-3**.

Table C6-3 Projected Injuries and Levels

Injury Severity	Definition	MAE Center Total	MDHSS Data Total
Level 3	Require Medical Aid	10,177	70,240
Level 2	Require Hospital Care	2,897	19,995
Level 1	Have life-threatening injuries	360	2,485
Total Number of People with Injuries		13,434	92,719

In addition to the human considerations and in compliance with the PETS Act of 2006, pets and companion animals must be included in planning projections. Projections indicate that 60,688 dogs and 68,403 cats will require sheltering by 72 hours post-incident (Table C6-4).

Table C6-4 Projected Shelter-Seeking Household Pets

Type of Pet	Number
Dog	60,688
Cat	68,403
Total Pets	129,091

Throughout the response phase (phase 2), it is assumed that roads, bridges, and other transportation infrastructure will be heavily impacted, which will necessitate major rotary air operations for both ingress and egress. Ground transportation will be utilized to the extent possible to support ESF-6 operations. However, air operations will be required in mass care and evacuation efforts to some extent, regardless of level of planning.

According to the MAE Center data, it is anticipated that within the first 72 hours nearly 1 million individuals will attempt to evacuate the impacted area. Evacuation will be severely restrained due to the collapse of a significant number of bridges and infrastructure. Two main routes have been identified to move evacuees from the impacted area. According to the calculations in Operational Tool 6.2, without implementation of contra-flow, it will take approximately 122 hours (5 days) for this population to evacuate the area using ground assets and personal vehicles (specific routes are mentioned below). Table C6-5 lists anticipated evacuees.

Table C6-5 Anticipated Evacuees

Route	Number
Saint Louis Area (Northern Route)	527,144
South-Eastern Missouri (Southern Route)	389,434
Other (Non-specified)	197,117
Total Evacuees	1,113,695

Additional situational analyses are provided in Section 6.0: Sections 6.1 and 6.2 provide detailed calculations regarding resource needs to support ESF-6 operations:

- 6.1 – Mass Care and Staffing Requirements (including household animals)
- 6.2 – Evacuation Projections.

1.1 Purpose

The purpose of this annex is to provide guidance regarding the functions of mass care and evacuation related to the NMSZ beyond those contained in statutory plans and authorities. This document outlines the associated limitations, organization, and course of action to execute the roles and responsibilities of ESF-6. More specifically, this annex intends to:

- Provide the ESF-6 Coordinator with the basis for evaluating and accepting or redirecting mission assignments and tasks received from FEMA, or other ESFs in response to an earthquake event in the NMSZ.
- Define the overall responsibilities of state agencies, Faith-based Organizations (FBO), and Non-Governmental Organizations (NGO) for providing mass care-related services for various incidents.
- Provide strategic planning guidance and authorities governing the enactment of ESF-6 operations following a catastrophic incident, to include specific directives regarding out-of-state evacuees and Missouri assets assisting those impacted.
- Define the organization, concept of operations, responsibilities, and procedures to adequately prepare for and respond to a catastrophic event and subsequent mass care operations.
- Outline federal, state, and local government responsibilities for the managed movement of people (be they Missouri residents or out-of-state evacuees), pets, and resources from an area of increased danger to an area of relative safety with feeding and sheltering operations.

This appendix addresses two key objectives:

Objective: Provide Evacuation Support
Objective: Provide mass care for the displaced population, including pets

To fully address these objectives, the appendix is divided into five key areas: sheltering, household pets, bulk distribution, feeding, and evacuation. The purpose of each sub-section is described below.

Congregate Care Sheltering

Establish the sheltering concept of operations for a surge of evacuees from the impacted area, in addition, sheltering those who reside within. This guidance will assist shelter planners in meeting FNSS in general population shelters, and obtaining lawful and equitable sheltering programs throughout the State, to the extent possible.

Household Pets

Establish the operational framework to protect pet health and safety, and coordinate effective use of public and private partnerships for the care and wellbeing of animals classified as either household pets or service animals. Specifically addressed within are the definitions of household pet and service animal, and the general concept of operation for pet evacuation and sheltering.

Bulk Distribution

ESF-7 will be primarily responsible for commodity supply to citizens within and outside the impacted area. However, the distribution of these supplies to the public will fall within the scope of this appendix. Within is a general concept of operations for Point of Distribution (POD) operations and implementation of the hub-and-spoke supply chain.

Feeding

Establish a framework for state and federal support of a coordinated, timely, and effective feeding response within the State of Missouri. This will include an integrated strategy and process for implementing coordinated feeding operations at each jurisdictional level, limiting duplication of efforts, and maximizing utilization of resources.

Evacuation

Specify the roles and responsibilities of state and federal agencies/departments for conducting evacuation operations, and address the operational concepts unique to a catastrophic earthquake.

1.2 Considerations

Congregate Care Sheltering

- Meeting the mass care needs of individuals following a catastrophic disaster will be extremely challenging and will take the resources of the local jurisdictions, state governmental agencies, NGOs, FBOs, and the Federal Government to provide an effective disaster response.
- MDSS is responsible for coordinating provision of emergency shelters if the local authorities are unable to meet the sheltering needs of their residents and request assistance. MDSS partners with the American Red Cross (ARC), The Salvation Army, and other non-government or volunteer agencies to provide typical sheltering operations.

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- All shelters will be capable providing services to the general population and those requiring FNSS, to the extent possible. Limited medical needs should also be considered when defining the scope of a shelter's capability.
- Many disaster survivors go to the homes of relatives and friends, or stay in commercial lodging. Disaster survivors who cannot afford hotel accommodations, run out of money, cannot reach the homes of relatives and friends, or cannot find space in a hotel or motel may require public shelter.
- FBOs may also open and operate shelters as part of a local emergency management plan, or as spontaneous shelters when civic and faith-based organizations believe a need exists. However, this activity should be coordinated with the local EMD.
- Minor children may become separated from their parent/guardian at the time of the disaster. The development of local and state reunification plans is essential for reuniting children with their parents.
- Populations likely to require mass care and shelter include the following:
 - Primary disaster survivors, including individuals with damaged or destroyed homes or homes in areas where utilities and services have been disrupted
 - Individuals who have been denied access to their homes
 - Transients, including nonresident workers, visitors, students, and homeless within the affected area.
- The MDHSS is the lead state agency for coordinating provision of health and medical services during an emergency or disaster.
- The most widely used mass care facilities are public buildings such as schools, community centers, and churches. School facilities should be used as shelters of last resort due to the need to reopen schools as soon as possible.
- Catastrophic sheltering will occur when large segments of the population are displaced from their homes for extended periods of time following a disaster. This can include evacuees from other states who make their way to Missouri and whose mass care needs must be met. While disasters begin and end locally, it is the duty of the State and its partners to assist local jurisdictions when they are unable (due to size and scope of the disaster) to provide an effective mass care response.
- Shelter intake processes should include a health screening to assist in identifying any individuals who have an acute medical condition or pose a threat to others. These individuals should be transferred to a medical shelter immediately. All other residents should be maintained in a congregate shelter and provision made to provide support services for those individuals with access or functional needs.
- Many people may not be willing to sleep in structure-based shelters and will need alternate shelter strategies, including tents and other soft-sided structures.
- Congregate care brings with it a series of public health concerns. Appropriate site selection and public and environmental health support of shelters is critical to success.
- The first 3 days following the earthquake, as shown in Table C6-6, will bring significant demand for shelter capacity for both persons and household pets. Shelter gaps are designated in Table C6-6.

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Table C6-6 Shelter Need vs. Physical Space Capacity

State Planning Regions	Needed Shelter Spaces	Shelter Capacity (Total)	Shelter Capacity (Post-Impact)	Shelter Gap (Post-Impact)	Needed Pet Shelter Spaces	Pet Shelter Capacity (Total)	Pet Shelter Gap
Area A	210	26,758	25,443		114	1,070	
Area B	4,319	1,150	1,150		2,342	230	
Area C	114,456	32,321	6,448		62,083	250	
Area D	161	3,100	3,100		87	3,500	
Area E	83,938	1,500	0		45,529	900	
Area F	18,239	667	667		9,893	110	
Area G	10,548	750	750		5,722	0	
Area H	135	5,700	5,700		73	0	
Area I	5,985	0	0		3,246	0	
Totals	237,991	71,466	43,248	194,743	129,089	6,060	123,029

Needed Shelter Spaces/ Needed Pet Shelter Spaces: Depicts the anticipated demand for sheltering based on immediate impact, does not account for the movement of the population. It is assumed that a significant population will move westward. Number of needed spaces in “host” regions, as depicted above, should not serve as an indication of overall shelter requirements.

Shelter Capacity (Total): Based upon information gathered from the National Shelter System (NSS), August of 2010. Data is subject to continual modification. All capacities generated by an analysis of available square footage. Displayed Regional capacity reflects facilities capable of accommodating 500 persons or greater.

Pet Shelter Capacity (Total): Based upon survey conducted by SEMA Emergency Human Services, September 2010.

Shelter Capacity (Post-Impact): Removal of all potential shelter sites residing within the liquefaction area. Likely removed facilities will be negatively impacted by the event, not viable for mass care.

Household Pets

- Missouri Humane Society is assigned as lead for the State coordinating the provision of shelter and medical services for household pets. Missouri Humane Society will be responsible for supporting the care and sheltering of all household pets or service animals for the duration of operations when local jurisdictions cannot meet the need. It is anticipated that multiple contractors and private and not-for-profit entities will be employed in response, with the understanding that contractors and private nonprofit organizations can be reimbursed through the State or eligible applicant under Public Assistance, but not through an independent application.
- A household pet shelter is any private or public facility that provides refuge to rescued household pets and the household pets of those seeking shelter.
- As stated in the PETS Act (2006), a household pet is a domesticated animal, such as a dog, cat, bird, rabbit, rodent, or turtle that is traditionally kept in the home for pleasure rather than for commercial purposes, can travel in commercial carriers, and can be housed in temporary facilities. Household pets do not include reptiles (except turtles), amphibians, fish, insects, arachnids, farm animals (including horses and animals kept for racing purposes).
- As stated in the PETS Act (2006), a service animal is any guide dog, signal dog, or other animal individually trained to provide assistance to an individual with a disability including, but not

limited to, guiding individuals with vision impairments, alerting individuals with hearing impairments to intruders or sounds, providing minimal protection or rescue work, pulling a wheelchair, or fetching dropped items.

Feeding

- Community organizations, FBOs, civic clubs, and local businesses such as restaurants will respond spontaneously. These groups will be incorporated into the feeding plan to the extent possible. These sources will most likely not have the resources to sustain efforts, especially in the event of critical infrastructure and key resources failure.
- The Local Mass Care Coordinator will have the primary responsibility of establishing a locally focused Feeding Task Force for prolonged feeding operations, the development of a feeding plan, and coordination with applicable state and federal agencies, CBOs, and NGOs.
- Feeding needs will likely exceed the resources and capability of any one agency or organization, requiring a combination of resources provided by federal and state organizations, and NGOs to deliver emergency mass feeding to affected populations. In these cases, it may be necessary to coordinate and prioritize resource requests and allocations through use of a state-level Feeding Task Force.
- Feeding agencies or organizations may request to use the United States Department of Agriculture (USDA) Foods by contacting the state Feeding Task Force. When the need for USDA's Foods or infant formula exceeds that which is available from within state inventories, the state Feeding Task Force will coordinate with USDA's Food and Nutrition Service (FNS) Regional Office to identify and obtain additional foods.
- Shelf-stable meals will be used initially to supplement feeding requirements; however, limitations on supply and transportation could cause shortages. Delivery will be hampered by debris blocking transit routes, lack of signage, downed bridges, or other complicating factors.
- Food storage could be difficult due to inoperable utilities. Emergency refrigeration and freezer capacity will be needed at key feeding and staging sites within the impacted area.
- The State may initiate procedures to request approval from USDA to operate Disaster Supplemental Nutrition Assistance Program (D-SNAP), formerly known as the Disaster Food Stamp Program, for counties that have received a presidential disaster declaration when the infrastructure has been restored.

Evacuation

- An evacuation plan coordinated at local, state, and federal levels must be established to provide for the mass care needs of residents displaced by catastrophic disasters. This plan will include evacuating local residents to communities and counties outside the affected area. In some instances, relocation to other states will be necessary.
- When evacuation is recommended and/or ordered by local government officials, the majority of those for whom evacuation has been directed will evacuate to predetermined sites; these sites are called Evacuation Assembly Sites. The percentage of people who will evacuate depends on the size and scope of the disaster, their locations within the affected areas, and personal circumstances.
- The National Mass Evacuation Tracking System (NMETS) for tracking evacuees will be implemented for transportation assisted evacuees.

- It is possible that evacuation of the population to other areas capable of providing support services may be the only option, and then only after available transportation routes and modes have been identified and cleared.
- The size and scope of the evacuation will largely depend on the disaster, damage to the infrastructure, and projected number of planned or spontaneous evacuees. A worst-case scenario will involve a catastrophic event that affects not only Missouri but other states as well.
- When hazards are highly visible or extensively discussed in the media, some people who are not at risk may spontaneously evacuate, and some of those individuals may seek public shelter.
- A large-scale catastrophic disaster that affects residents for a longer period of time may lead to a significant increase in the number of evacuees/residents seeking shelter.

1.3 Assumptions

Critical assumptions for ESF-6 and all ESFs are included in the Base Plan. Specific to ESF-6, the following critical assumptions are also applicable:

- In the event the local authorities are unable to meet the mass care needs of their residents, the MDSS and the Emergency Human Services Branch based out of SEMA will stand up the ESF-6 partners to supplement and support local efforts in providing an effective mass care response.
- Mass care resources from outside the impact area will be unable to enter the catastrophically impacted areas for some time.
- Mass care resources will receive priority of entry to the catastrophically impacted areas.
- Initially, all resources used in this will be in-state resources. Additional resources from outside the State will be requested immediately as needed. These resources will be quantified through a gap analysis.

Congregate Care Sheltering

- All mass care efforts begin on the local level.
- Local emergency management will identify mass care leads (Local Mass Care Coordinators [LOMACC]); while the State will designate which agency or organization will serve in the mass care lead at the state-level MDSS.
- Disaster survivors will form loose groupings of individual shelters or group tents erected in the affected area and near their homes. These temporary shelters (non-congregate care) will provide minimum shelter but the affected population will rely on other locations (PODs) for food, water, first aid, and information.
- Shelters will be managed by a combination of resources including state, local governmental agencies, and volunteer organization.
- ARC, local government, and NGO shelter providers will need immediate state and federal resource support for shelter structural assessments, site security, food, bottled water, transportation of resources, sanitation equipment, medical personnel, and communications equipment.
- ARC, the Salvation Army, and other NGOs (or volunteer agencies) that traditionally deliver mass care in a disaster will respond with available resources in accordance with the specifications of their charters and in cooperation with emergency management officials.

- Survivors will be utilized to manage and staff shelters, and will need to be trained on site to take on these roles.
- Shelter populations will gradually decrease as utilities are restored; allowing people to return home and, as transportation improves, allowing shelter residents to leave the area.
- A significant percentage of shelter capacity in the affected areas, as shown in Table C6-6, could be uninhabitable until the shelters are cleaned and repaired, resulting in a significant local shortfall of shelter space within the impacted areas.
- Spontaneous shelters will begin to open hours after the incident, but are not likely to be properly supported for several days. The shelters will need resources and will also need to be consolidated.
- Key shelters may become unavailable due to damage within the impacted areas.
- Mega-shelters may be opened during the first week to shelter evacuees.
- Aftershocks will cause additional damage and also fluctuations in shelter occupancy.
- A variety of national and local NGOs, community organizations, and FBOs, as well as thousands of volunteers, will come forward to support response and recovery efforts, requiring extensive coordination.
- Shelters should be American Disability Act (ADA) compliant and will be expected to have a level of specialized equipment available, or attainable, for individuals requiring FNSS. Though this need will not be immediate, it can be projected over the lifetime of the incident. Table C6-7 outlines projected needs. These data are inclusive of the entire impacted population, not just those seeking jurisdictionally provided sheltering.

Table C6-7 Access, Functional Needs, and Special Considerations

Consideration	MAE Center Number	MDHSS Data Number
Impoverished	483,558	483,558
Vulnerable Age	483,558	483,558
Disabled	483,558	483,558
Hospitalized	635	8,036
Medical Needs	140,891	140,891
Non-English Speaking	48,470	48,470

- People seeking mass care will be from diverse cultures and speak a variety of languages (see Table C6-7).
- Mass care support consisting of feeding, bulk distribution of comfort kits, and other needed support; mental health support; and basic first aid will be provided in the shelters. To the extent possible, this assistance may need to be provided through shelter sites to those who are sheltering in place at their residences.
- Support that cannot be filled by the ARC and other Volunteer Organizations Active in Disaster (VOAD) will be provided by the SEOC.
- Shelters will accommodate service animals.

Household Pets

- Disaster survivors will take their pets when evacuating or moving to congregate sheltering. Organized evacuations will generally permit household pets to accompany evacuees. Missouri ESF-17 (Humane Society of Missouri), per the SEOC Standard Operating Guide (SOG), is responsible for coordinating pet sheltering and evacuation.

Bulk Distribution

- Shelf-stable meals, tents, tarps, and bottled water will be distributed at PODs, and may bypass staging areas depending on circumstances.
- PODs are intended to support the distribution of supplies to the general public. Staging Areas will serve as resupply points for mass care operations.
- Debris clearance from roads and other transportation routes to shelters and hospitals will be a priority for the impacted counties so that mass care supplies can be shipped directly to these facilities.
- Many people, in order to protect their property and belongings, will remain at their residences, staying in make-shift shelters in their yards or vehicles. These people may need mass care support and resources.

Feeding

- Non-traditional food preparation or shelf-stable meals will be emphasized in the catastrophically impacted areas.
- Insufficient meals/commodities will be available in the catastrophically impacted areas to provide traditional disaster feeding calorie counts per person.
- Insufficient transportation resources will be in the catastrophically impacted areas to transport meals/commodities during the initial days post-event.

Evacuation

- Shelter will be necessary for displaced residents and will be necessary for evacuees who leave their communities.
- Disaster survivors will likely evacuate west to western Missouri. Some evacuees might go to other Region VII states and beyond.
- Once surface transportation routes and air traffic have been restored into the affected area, a significant number of people will self-evacuate, many of whom will require shelter support at their ultimate destination.
- NMETS is currently being implemented and deployed throughout the State. This system will be utilized for tracking transportation-assisted evacuees only.

1.4 Limiting Factors

ESF-6 will be limited as follows:

- Initial information about spontaneous shelters that have been opened by churches, schools, and other community groups will be difficult to assess.
- Most shelters will be under-resourced for critical supplies, including medical, food, infant care items, and sanitary supplies.

- Local sources of critical supplies will be quickly exhausted or unavailable.
- A shortage of communications equipment at shelters, temporarily for staging and for evacuation and sheltering. This will include equipment for intra- and inter-site communications, particularly when commercial landline and cellular networks are disrupted.
- Limited communications capability will exist at the shelters. Damage and overload conditions on the public dial phone network will limit the ability of shelter facilities to communicate with medical services, law enforcement, and other first response services. Deployment of alternate communications capability and restoration of phone services to shelters will be a priority.
- Greater need will be evident for shelter space than what is available, prompting opening of more spontaneous shelters and mega-shelters, as well as tents near shelter sites and in open spaces such as parks and parking lots.
- Substantial logistical effort to distribute food within the affected area will be complicated by compromised transportation systems; mass care operations will be constrained by the following:
 - Shortfall of security personnel that may compromise the safety services at the shelters
 - Lack of a coordinated system to address procurement of access and functional needs equipment and transportation of access and functional needs population
 - Road damage that affects the ability of service providers such as ARC and FEMA to transport personnel and materials into the affected area. Shelters require provisions such as cots, communications equipment, security services, sanitation facilities, showers, food, water, medical resources, and sometimes generators. Due to road damage, some shelters may not be able to provide all of these resources.
- Evacuating a large number of individuals within a short period of time will be difficult due to congested and damaged roadways and bridges, and limited transportation access.

2.0 Mission

The ESF-6 mission for this response is to provide support for mass care operations that provide life sustaining food, water, and shelter to disaster survivors (including household pets), and to support local mass care feeding and sheltering operations, in addition to facilitating an effective and efficient evacuation.

ESF-6 goals include:

- In a time-phased operation within the catastrophically impacted area, deliver a minimal level of feeding and shelter to all survivors (including household pets) consistent with the amount of mass care resources available and the number of survivors seeking assistance.
- Provide consistent and adequate mass care resources to survivors in the non-catastrophically impacted areas and within the host communities.
- Ensure delivery of mass care is integrated and collocated with delivery of medical, emergency assistance, and human services resources.
- Provide access to family reunification and notification information in order to assist disaster survivors' information requests.

As the ESF-6 coordinator and primary agency, FEMA coordinates and leads federal resources as required to support local and state governments and NGOs in performance of the following missions:

- Mass care and emergency assistance, to include sheltering, feeding operations, emergency first aid, and bulk distribution.
- Assistance required by individuals, families, and their communities to ensure that immediate needs beyond the scope of the traditional “mass care” services provided at the local level are addressed. These services include support of evacuations (including registration and tracking of evacuees), reunification of families, pet evacuation and sheltering, support of shelters, support of medical shelters, nonconventional shelter management, coordination of donated goods and services, and coordination of volunteer agency assistance.
- Housing, including the housing components of the Stafford Act, such as rental assistance, repair, replacement, manufactured housing, semi-permanent and permanent construction, and access to other sources of housing assistance (this plan will not address intermediate term housing).

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases, and Table C6-8 lists (sub) phases of Phase 2 (Response).

Table C6-8 Response Phase Periods

Response Phase	Operational Period
2a – Activation/Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Sustained Response	E + 72 – E +120 hrs

The Response Phase and Operational Periods are designed to be flexible, as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

Objectives: Support evacuations

Objective: Provide mass care for the displaced population, including household pets.

Throughout this appendix, the specific functions of local, state, and federal ESF-6 response agencies are detailed. Due to differences in jurisdictional planning, responsibilities for these tasks differ depending upon the level of governance. See Table C6-19 for detailed crosswalk and ESF-6 Coordination Structure of functions and related stakeholders.

Coordination and Control

State

Coordination and control of emergency response and recovery operations in the State of Missouri will be exercised in accordance with the SEOP, and in accordance with NIMS and relevant NRF requirements. Specific department responsibilities are stated below and shown on, Figure C6-8:

- A MDSS staff member will serve as the primary agency representative and coordinate mass care ESF-6 activities within the SEOC.
- A SEMA staff member will serve as the primary agency representative of the Evacuation Management Team (EMT) and will coordinate all Evacuation ESF activities with the SEOC and, if necessary, State Area Coordination Center(s) (SACC).

REDACTED

- SEMA Emergency Human Services will appoint a Bulk-Distribution Coordinator or designees who will serve as the primary agency representative and coordinate activities within the SEOC and as needed for the SACC(s). This individual will be responsible for coordination with the PODs, working with ESF-7 Logistics.
- SEMA Emergency Human Services will appoint a Feeding Coordinator or designee who will serve as the primary agency representative and coordinate activities within the SEOC and as needed for the SACC(s). This individual will be responsible for coordination with ESF-7 Logistics and the state and local Feeding Task Forces.
- The Emergency Human Services Statewide Volunteer Coordinator will oversee the Volunteer Donations Coordination Team, Multi-Agency Donations Warehouse, and the Volunteer Reception Centers throughout the State from the SEOC.
- Household pet care will be coordinated by the Missouri Humane Society from the SEOC.
- A representative from 2-1-1 will be present in the SEOC and provide data on the 2-1-1 operations, if available.
- The ARC is a support agency for ESF-6, providing technical assistance, resources, and services for mass care along with other NGOs. ARC has a representative in the SEOC to assist in providing situation awareness and mass care coordination.

Federal

All federal ESF-6 personnel at both the national and regional levels will ensure that the principles for all-hazard response are followed at all times. This doctrine has established the following principles, as applied to ESF-6:

- The NIMS is the foundation of the response organizations supported by ESF-6.
- All personnel involved in all-hazard response coordinated through ESF-6 will be supported and managed by an agency leader, agency liaison, or interagency Incident Management Team.
- Providing support to FEMA and other ESFs is predicated on the availability of resources. Missions requested of ESF-6 should be considered and accepted in order of priority:
 - Agency response mission
 - ESF-6 Mission under the NRF
 - Support to other ESFs as defined in the NRF ESF annexes
 - Other support not specified in the NRF.
- Resources are assigned commensurate with each unit's level of training and the adequacy and availability of resources.
- The lines of authority will be as follows:
 - Delegation of authority will flow from the Region VII Recovery Division/Individual Assistance (IA) leadership to the ESF-6 Coordinator.
 - The ESF-6 Coordinator will delegate the authority to the ESF-6 staff at the Regional Response Coordination Center (RRCC) to accept FEMA mission assignments in concurrence with the ESF-6 Coordinator and the National ESF-6 Coordinator/Primary Leader.

- After a Joint Field Office (JFO) is established, the ESF-6 Coordinator from the RRCC will relocate to the JFO and maintain position as Emergency Support Function Liaison for the incident.

3.1.1 General Concepts:

ESF-6 encompasses a number of activities within this plan; these distinct areas are outlined as follows:

Congregate Care Sheltering

- Two main strategies will be employed following a major earthquake: in-place sheltering within the impacted area and evacuation for those seeking refuge outside the impacted area. In-place sheltering will be supported by the bulk distribution process outlined below.
- Emergency shelter for disaster victims includes use of pre-identified shelter sites in existing structures, creation of temporary facilities or temporary construction of shelters, and use of similar facilities outside the disaster-affected area, should evacuation be necessary.
- All sheltering operations should be conducted in a way that accommodates those with functional and/or access needs, in addition to the general population. In order to accomplish this task, a Mass Care Emergency Response Team (MCERT) and a Functional Assessment Service Team (FAST) will be established. These groups will forward deploy into the affected areas within 24 hours post-incident.
- The purpose of the MCERT will be to:
 - Determine the most effective methods for delivering the mass care resources to the affected area (human and material resources).
 - Prioritize the mass care needs of jurisdictions; ensure that all affected areas receive the level of mass care assistance needed.
- The purpose of the FAST will be to:
 - Assess the mass care needs in the affected area(s), particularly of individuals with medical, access or functional needs.
 - Work with the local mass care responders to determine specific mass care (human and material) needs for each jurisdiction and sheltering operation.
 - Meet the needs of children and adults with and without access or functional needs.
- MCERT and FAST consists of trained government employees and personnel from community-based organizations and NGOs ready to respond to and deploy to disaster areas to work in shelters. Team members should have extensive knowledge of the populations they serve (including that population's needs), as well as available services and resources including housing, benefit programs, and disaster aid programs.
- The FAST may be deployed as shelters are opened, and should remain until no longer needed. The FAST can also transfer to another shelter as needed or requested, deploying to shelters as jurisdictions become aware of the FAST's existence during major events.
- See Operational Tool 6.5 for detailed information relating to the MCERT and FAST.
- In line with federal guidance, congregate care sheltering operations should address the considerations listed in Table C6-9 when implementing this concept of operations.
- Ultimately, mass care planning and implementation are responsibilities of the local Emergency Management Director (EMD). Each EMD should, to the extent possible, ensure that a person from the local community is appointed to lead the local mass care preparedness and response

efforts; this individual will be referred to as the Local Mass Care Coordinator (LOMACC). The LOMACC should actively engage Community Organizations Active in Disaster (COAD) to assist in the provision of these services at a local level.

Table C6-9 Congregate Care Shelter Operational Considerations

Issue	Detail
Physical Access	Ensure access needs are met, including: entrances, routes to all services, passenger drop off/pick-up, parking, sidewalks, sleeping areas, restrooms, telephones, drinking fountains, eating areas
Dietary	Ensure meals and snacks are provided to all shelter residents including children and adults with specific dietary needs and restrictions
Service Animals	Allow service animals to accompany shelter seekers in accordance with ADA guidance. Must provide food, water, and toilet facilities for service animals.
Communications	Take appropriate steps to ensure that communication is as effective as communication with the general population
Bathing and Toileting Needs	Ensure bathing and toileting facilities are adequate for children, adults and individuals with access and functional needs
Quiet Areas	Include a strategy for provide quiet areas within each shelter
Mental Health	To the extent possible a licensed mental health professional present in population shelter at all times.
Children	The specific needs of children and unaccompanied minors are considered and planned for.
Medical and Dental Services	Should include medical care that can be provided in the home setting. Medical stations should be developed with a minimum staff of 1 Registered Nurse and 1 Paramedic 24/7. First Aid Station 1:100 shelter residents, if possible.
Medication	Means of obtaining, storing, dispensing, documenting, and disposing of medications in a general population shelter.
Transportation	Ensure there is access to vehicles and ambulances, and drivers which can transport children and adults with and without access and functional needs and service animals.

Local jurisdictions throughout the State should be prepared for congregate care sheltering operations. Response efforts for the New-Madrid Seismic Zone will be coordinated using a response tier system based upon geographic location, proximity to impact area, and capacity to provide mass care. The jurisdictions listed in Table C6-10 will receive initial consideration as locations for evacuee shelter operations.

Mass care will require a significant level of staff and volunteer support. Local jurisdictions have the primary responsibility to provide staffing to support the mass care of the evacuating population. However, in this instance, the demand for resources will be paramount. The Statewide Volunteer Coordinator working with the MDSS and various NGOs (ARC, the Salvation Army and others) will coordinate activation and deployment of non-medical staffing resources. Medical staffing will be coordinated by the MDHHS (refer to ESF-8). It is assumed that by 3 days post-incident, over 26,000 individuals will be required to support congregate care operations (see Table C6-11).

Table C6-10 Missouri Host Cities

Missouri Host-Cities	Area
Nevada	D
Springfield	D
Joplin	D
Kansas City Metropolitan Area	A
Harrisonville	A
Warrensburg	A
Marshall	A
Sedalia	A
St. Joseph	H
Maryville	H
Chillicothe	H
Jurisdictions Outside State	-

Table C6-11 Staff Requirements

Staff (Training Level)	Needed Personnel	Available Staff (Total)	Available Staff (Post-Impact)	Gap (Post-Impact)
Shelter Staff (general)	17,142	425	142	17,000
Supervisor/Manager Shelter Staff (trained)	5,471	2,227	742	4,729
Medical Trained Staff (FNSS accommodation)	3,974	Information Not Available	Information Not Available	Information Not Available

Needed Personnel: Number of shelter staff, supervisors/managers and medical staff required to provide shelter support, based upon MAE Center model, two shifts, 24 hour operation.

Available Staff (Total): Number of shelter staff available for State based upon September 2010 ARC survey.

Available Staff (Post-Incident): 1/3 of total available staff anticipated post-impact.

Household Pets

Household pets, as defined by the Pets Evacuation and Transportation Act (PETS Act) of 2006, will be incorporated into overall ESF-6 operations. Animals beyond this definition will be provided for according to the ESF-11 Appendix of this OPLAN.

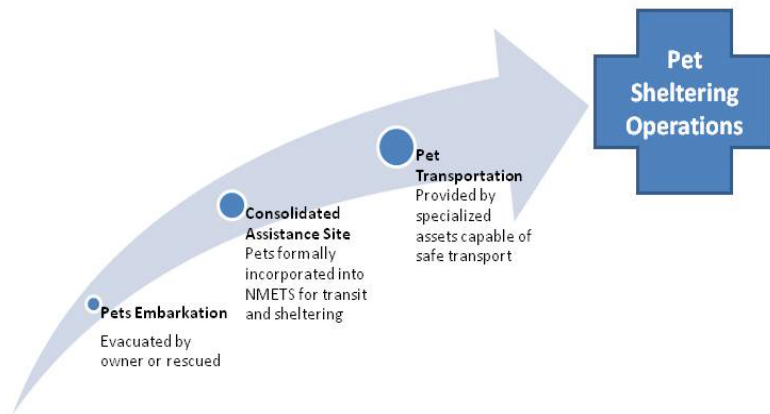
Animal owners have the primary responsibility for the survival and well-being of their animals.

Service animals that are specifically trained animals used by a person with a disability to help with daily living are allowed to accompany the owner in congregate care facilities.

The general concept of operations for pets is inclusive of evacuation operations, as well as mass cares (see Figure C6-1). Local, state, federal, and all supporting stakeholders should make the appropriate allocation of resources to accommodate household pets, to the extent possible.

Household pet evacuation will be conducted utilizing the same concept of operations as that for general evacuation (see below). The embarkation of pets will be the responsibility of the owner of the animal in conjunction with the local jurisdiction in which the owner resides. Integration of transportation-assisted pets into the Consolidation Collection Sites will be essential to cohesive tracking and evacuation from the impacted area. Pet transportation will be coordinated by the Missouri Humane Society in conjunction with ESF-7, Logistics and the Evacuation Management Team.

Figure C6-1 Household Pet Concept of Operations



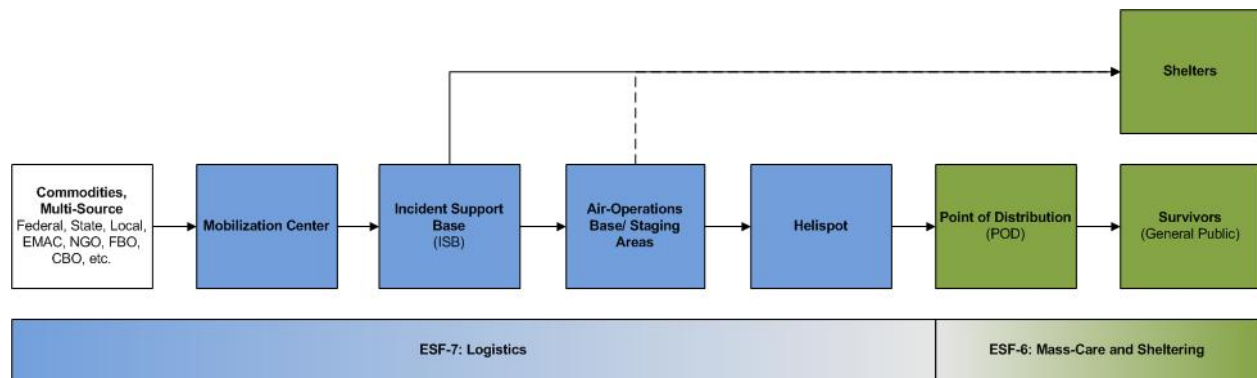
Bulk Distribution

Bulk distribution will be actively coordinated with ESF-7 Logistics throughout response operations. Working with local jurisdictions, sites should be assessed, selected, and established, both within the affected area and outside, for bulk distribution of commodities. The relationship between ESF-7 and ESF-6 is defined below in Figure C6-2.

ESF-6 will be responsible for the distribution of delivered supplies to identified survivors; this activity will be facilitated by appointing a Bulk Distribution Coordinator at the state level. This individual will

Figure C6-2 Commodity Distribution Chain

serve as a liaison with ESF-7 and coordinate the distribution of goods.



PODs will be the responsibility of ESF-6 at the state level. PODs are centralized locations from which resources are distributed to support individuals, as well as various response operations. Individuals can obtain life sustaining commodities at PODs following a declared emergency or disaster, including shelf-stable meals, tents, tarps, bottled water, and medications. Resources may bypass staging areas for direct delivery to PODs depending on the circumstances. The anticipated number of PODs in Missouri is 23 to support individuals, and 10 to 20 to support response operations.

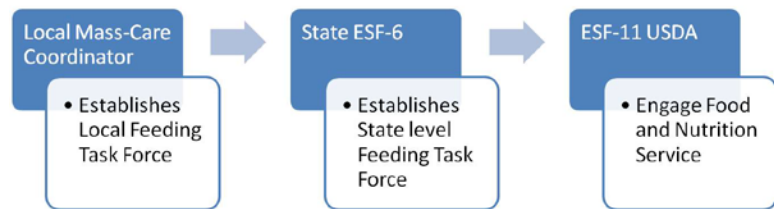
The mechanism for channeling solicited and unsolicited donations and volunteer assistance will also fall within the ESF-6 concept of operations. These operations will be handled in accordance with Annex U, Donations and Volunteer Management, of the SEOP. Decisions relating to prioritization and distribution

will be made by the State Donations and Volunteer Coordination Team (DVCT) under the Statewide Volunteer Coordinator, in conjunction with the FEMA Donations Coordinator. Distribution will be accomplished in accordance with the process outlined above.

Feeding

Feeding operations will be coordinated by the LOMACC for each jurisdiction (see Figure C6-3). It is likely that a local Feeding Task Force will be established for prolonged feeding operations. The local Feeding Task Force should be an interagency collaborative committee capable of leveraging resources from all available sources.

Figure C6-3 Feeding Concept of Operations



In certain instances, a state-level Feeding Task Force may be convened to assist in allocation and prioritization decisions. The state-level task force should have representation from all agencies and organizations involved in feeding operations (i.e., NGOs, FBOs, CBOs, private sector, etc.) The state-level Feeding Task Force may assist local jurisdictions per their request and will engage the USDA’s FNS Regional Office for additional resources. This process is outlined in Figure C6-3.

Evacuation

This section describes the concepts and provisions through which the SEOC and local EMD within the impacted area will determine the need for, and implement, a regional evacuation. This concept of operations provides guidance and structure for planning and implementation of regional evacuations.

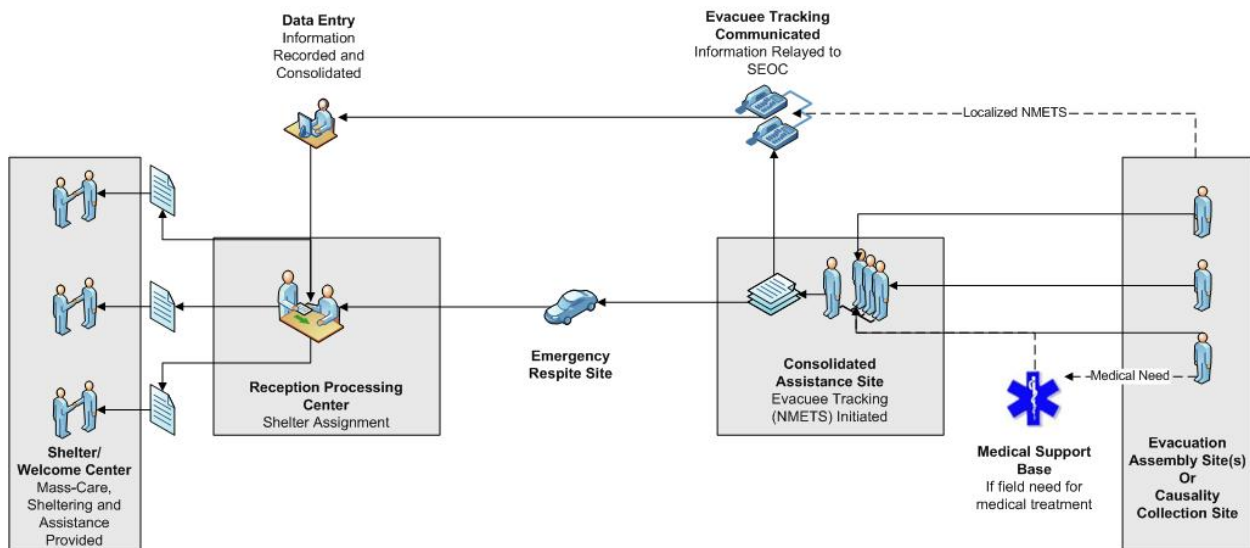
All large-scale evacuations will be overseen by the Evacuation Management Team (EMT) from the SEOC. The EMT is a multidisciplinary team which can support the evacuation efforts, make recommendations to the Unified Command (UC), and coordinate with local jurisdictions. The composition of the EMT is listed in Table C6-12. The EMT will be actively engaged in assessing the impact to jurisdictions and developing a course of action for conducting evacuation operations.

Localized evacuation will be the responsibility of the local jurisdiction. Once a regional evacuation has been implemented by the EMT, the overall concept of operations is outlined in Figure C6-4 below. Throughout this process, the EMT and the local EMDs will coordinate efficient deployment of resources, utilization of available evacuee shelter capacity, and effective modifications to evacuation routes, as necessary.

Table C6-12 Evacuation Management Team Composition

Agency Represented	ESF-#
Department of Public Safety	ESF-13
Public Information Officer (PIO)	ESF-15
State Emergency Management Agency (SEMA) (Lead)	ESF-5
Missouri Department of Natural Resources (MDNR)	ESF-10
Missouri Department of Transportation (MoDOT)	ESF-1
Voluntary Organizations Active in Disaster (VOAD)	ESF-6
Missouri Department of Social Services (MDSS)	ESF-6
Missouri Department of Health and Senior Services (MDHSS)	ESF-8
Missouri State Highway Patrol (MSHP)	ESF-13
Missouri National Guard (MONG)	ESF-16
Missouri Department of Mental Health	ESF-6

Figure C6-4 Evacuation Concept of Operations



As shown on Figure C6-4, the overall evacuation concept of operations is as follows:

- Evacuees will embark from either an Evacuation Assembly Site (EAS) operated by a local jurisdiction or from a Causality Collection Site if rescued.
- If the evacuee has medical needs, he/she may be routed to one of several Medical Support Bases (MSB) established within the impacted area. If there are no medical needs, evacuees will be relocated to a Consolidated Assistance Site (CAS).
- Transit from an EAS to a CS will be accomplished by ground transportation to the extent possible; however, within the impacted area this may be impossible. Therefore, Evacuation Assembly Sites should have infrastructure to receive rotor wing assets.
- At a CAS (most likely two locations in the entire State), evacuees will receive assistance from local, state, and federal agencies. Services available should include Evacuee Assistance Center, Respite Center, Medical Operations, and Mortuary Operations. These sites will be located along

the two major evacuation routes. At these sites, evacuees will be staged for further evacuation to host cities. Formal evacuee tracking will be implemented for all transportation assisted evacuees, if not already accomplished.

- Tracking information will be relayed to the SEOC for consolidated tracking.
- The Statewide Volunteer Coordinator will ensure resources are available to input all tracking information (human, household pet, and belongings) into a central database. This information will be provided, as appropriate, to the host jurisdiction destination.
- Transportation from CASs to the Reception Processing Centers (RPC) will be accomplished using ground assets to the extent possible.
- Along the evacuation route will be at least one location designated by the EMT to serve as an Emergency Respite Site (ERS). These locations will be capable of providing fuel and water to both transportation-assisted evacuees and self-evacuees.
- Once relocated to the destination, evacuees will arrive at a RPC. RPCs are operated by local jurisdictions receiving evacuees, with state and federal assistance, per request. They will provide central locations for evacuee shelter assignments and provision of any individual assistance.
- The SEOC evacuation tracking system (the National Mass Evacuation Tracking System) will capture the evacuee's arrival and shelter assignment for comprehensive recording.
- Evacuees will then be transported, if required, to a shelter. In certain jurisdictions which have multiple shelters and are without a formally established Reception Processing Site, a Welcome Center may be established to receive evacuees prior to arrival at the individual shelter.

Descriptions of the function-specific sites are provided below (all sites should be capable of providing FNSS):

- **EAS** – A locally operated site where evacuees will be directed to receive assistance. These sites may also serve as a local collection point for search and rescue (S&R) operations. Support should include food, water, and restrooms, as well as any available medical support. Evacuees will move from this site to a CAS.
- **Casualty Collection Site** – A locally selected and operated location where rescued survivors are assembled by ESF-9 Urban Search and Rescue (US&R).
- **Medical Support Base (MSB)** – A state and federally supported forward location to support medical triage, treatment, and evacuation. MSBs may be located in the impact zone if conditions warrant. Depending on injury type and severity, medical evacuees will move from this site to a CAS or directly to a hospital facility outside of the impact zone.
- **CAS** – A state and federally supported location or series of locations where evacuees will be directed and assembled prior to significant relocation. Available Disaster Medical Assistance Teams (DMAT) will be stationed at each location to support medical treatment, and medications will be available. This facility will be the consolidation location for each locally operated EAS. Each CAS will provide the following services: (1) evacuee processing and family assistance (to include household pet operations), (2) Respite (food, water, personal hygiene and short-term rest), (3) Medical operations (DMAT operations, patient treatment, medical evacuation), and (4)

Figure C6-5 Consolidated Assistance Site Concept of Operations



Mortuary operations (Figure C6-5). Provision of these services will not necessarily occur within the same structure or proximity, but within the same jurisdiction. Formal evacuation tracking will be initiated at these locations. Evacuees will move from this site to a RPC for shelter placement and other shelter services.

- ERS – A location along the evacuation route between the CAS and RCP that will provide water and fuel. See Table C6-13 (a & b) for primary and alternate locations for ERSs.

Table C6-13(a) Respite Sites

Potential Missouri Respite Sites (Primary)	Area
Sedalia	A
Jefferson City	F
Union	C
Willow Springs	G
Van Buren	G
Marble Hill	E
Dexter	E

Table C6-13(b) Respite Sites

Potential Missouri Respite Sites (Alternate)	Area
Rosebud	F
Gray Summit	C
Wildwood	C
Mansfield	G
Winona	G
Piedmont	E
Poplar Bluff	E

- RPC – These locations (Table 6-14) will receive evacuees and direct them to locations where they can seek short-term shelter. Evacuees will move from these sites to congregate care shelters or other shelter options.

Table C6-14 Reception Processing Center Locations

Reception Processing Center Location	Area
Kansas City Metropolitan Area	A
Springfield	D

- Congregate Care Shelters – These facilities will support both the general population and those individuals who require FNSS. They should serve a minimum of 500 persons. They will be equipped so that individuals with access and functional needs can seek temporary lodging, food, hydration, and short-term lodging.

This support system is designed to meet needs of ESF-6 and ESF-8; to provide an achievable transportation model for patients, evacuees, and resources; and to place an upper limit on the number of sites to which health and medical assets must be transported. Other definitions that may be useful in ESF-6 and ESF-8 operations include:

- Welcome Center – A location where a larger host city may process evacuees and route them to a specific sheltering location. This may also be the location where assistance programs and other resources are shared. This will not be a shelter.
- Host City – Jurisdictions throughout the State capable of hosting and sheltering evacuees.
- Unaffiliated Shelters – Spontaneous shelters which are not formally supported by governmental systems. They could be evacuees sheltering with family, or other situations where sheltering is provided “out-of-the-system.”
- Self-Evacuees – Individuals who evacuate the area via personally arranged methods.
- Transportation-Assisted Evacuees – Individuals who require assistance in evacuating the area due to inability to self-evacuate or lack of transportation.
- National Mass-Evacuation Tracking System (NMETS) – Manual and computer-based systems designed to assist state and local jurisdictions in tracking transportation-assisted evacuees. NMETS includes paper-based, low-tech, and advanced technology systems.

Regional evacuation is anticipated to occur initially along two primary routes, north and south. The northern route extends from the St. Louis Area, and the southern route extends from the Boot heel (southeastern Missouri). These routes are displayed graphically on Figure C6-6 and subject to change based on the impacts of the disaster.

Northern Route (St. Louis embarkation):

- Hwy 100 westward from St. Louis County to the junction of Hwy 100 and I-44.
- Southwesterly to the junction of I-44 and Hwy 50.
- West on Hwy 50 to Sedalia, Missouri, then to Kansas City, Missouri.

Southern Route (Boot heel embarkation):

- From the junction of Hwy 34 and Hwy 72 near Jackson, Missouri, west on Hwy 34 to the junction of Hwy 34 and Hwy 60.
- West on Hwy 60 to Springfield, Missouri

Interstate highways are limited access routes where entrances and exits can be controlled to make them into one-way outbound evacuation routes, if implemented by the EMT. The Missouri Highway Patrol (MSHP) and the Missouri Department of Transportation (MoDOT) will provide the management of traffic flow, assisted by the Missouri National Guard (MONG) if necessary.

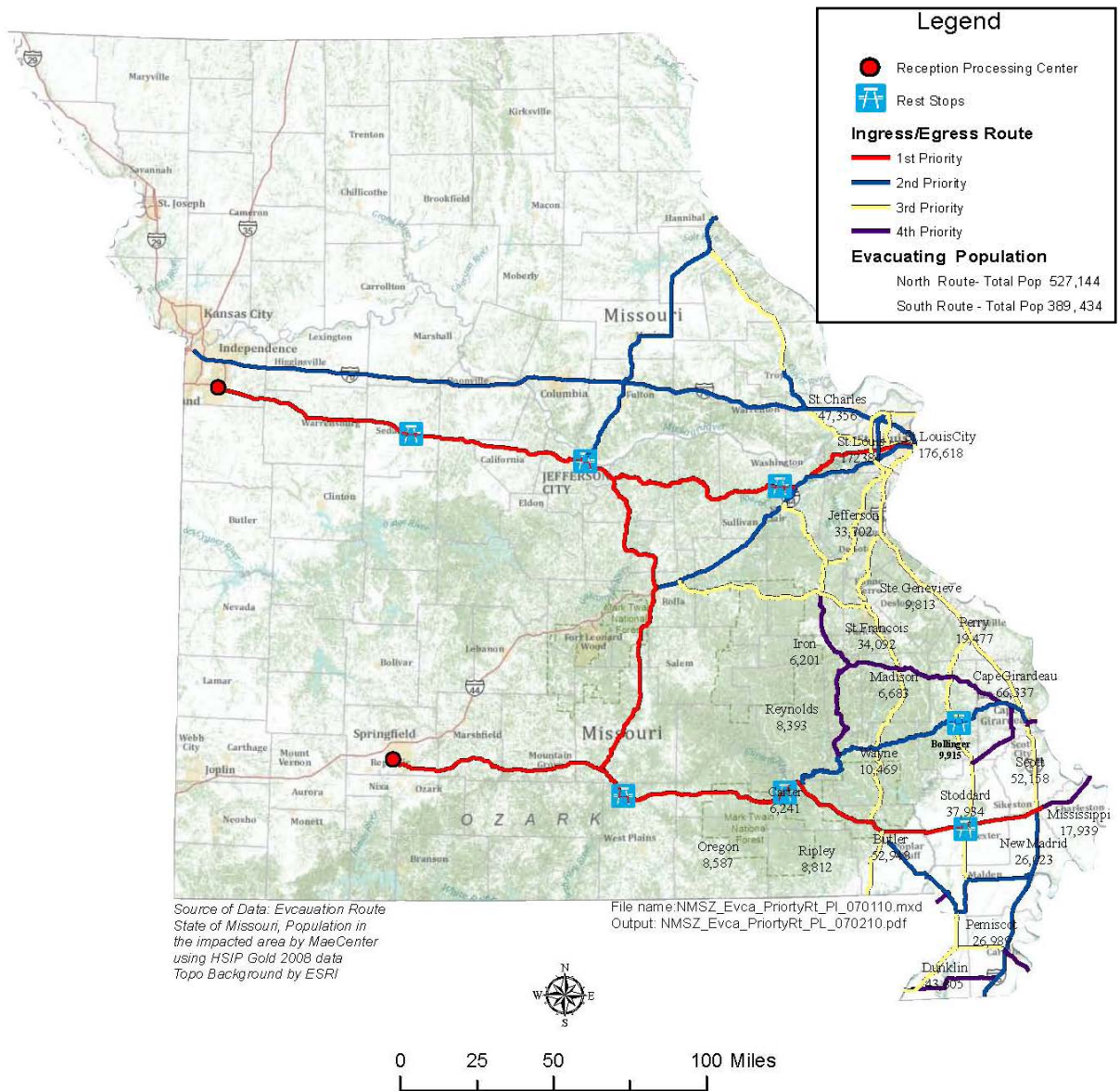
MODOT and law enforcement authorities will control evacuation traffic from the point it enters the evacuation route network.

Priority will be given to residents of the most severely impacted areas

Impacted counties/cities will prepare to activate EASs for those awaiting embarkation.

People in the impacted area will be advised which routes to use and which destinations have shelters currently available. Shelter seekers will be directed to a Reception Processing Center for relocation assistance.

Figure C6-6 Missouri Evacuation Map



3.1.2 Phased Response Concepts

3.1.2.1 Phase 2a: Alert/Notification

Purpose of Phase

Three primary purposes of this phase include:

1. Notify and activate all ESF-6 response organizations based on defined automatic activation thresholds.
2. Establish systemic lines of communication among local, state, and federal response agencies to develop a common operating picture (COP) and to maintain situational awareness.

3. Establish the Unified Coordination Group (UCG) to facilitate effective and expedited response operations.

Achieving these goals will provide information to define incident-specific ESF-6 priorities and to set an initial course for deployment of assets.

End State of Phase

The desired end state of Phase 2a is the activation and early employment of appropriate ESF-6 response resources, to include: congregate care sheltering, sheltering of household pets, bulk distribution, feeding, and evacuation operations. Notification of appropriate agencies should occur in accordance with established thresholds. Lines of communication should be established and maintained.

Local Mission-essential Tasks

Local jurisdictions will be responsible for provision of ESF-6 services to their citizenry. Initial activities should include:

1. Activation of sheltering, feeding, bulk distribution, evacuation, and household pet operations
2. Provisions of situational reports (SITREP) and administrative reports as required to the SEOC
3. Review of procedures for reporting status of mission assignments with focus on resources committed.

Congregate Care Sheltering

1. Assist with damage assessment and SITREPs by providing information on sheltering operations (see ESF-5).
2. Identify the lead agency for mass care at the local level and engage it in Emergency Operations Center (EOC) activities.
3. If not already accomplished, appoint a Local Mass Care Coordinator.
4. After determining needs, activate existing memorandums of understanding (MOU) with potential shelter location(s).
5. Jurisdictions should give consideration to resource availability and sustainability of operations.
6. If a shelter location is in a public school, the partner agencies and school official will inventory commodities stored at the school for use of those commodities to prepare meals for mass care operations.
7. Identify those populations within the community requiring FNSS; assess the impact of the incident on these populations. Prioritize restoration of services or protective actions accordingly.
8. Activate and secure transportation assets for movements of shelter seeking population, supplies, and bulk commodities.
9. Assess and plan reunification of families separated by the incident.
10. Participate in EOC conference calls providing an update of shelter information per the schedule established by the State ESF-6 Lead. Jurisdictions should submit resource requests to the SEOC (material and human) as needed.
11. Activate COADs and local Mass Care Committee.
12. Activate volunteer engagement and reception plans.

Household Pets

1. Activate MOUs and community-based organizations to support household pet shelter operation.
2. Notify the Missouri Humane Society of potential household pet shelter location, capacity, and number of sheltered pets. Request any technical assistance and communicate needs and/or gaps in service provision. Provide for rescue, care shelter, and essential needs of companion animals and service animals owned by disaster victims prior to, during, and following a disaster.

Bulk Distribution

1. Assess PODs to determine their viability (damage from the incident may render the facility obsolete).
2. Activate PODs throughout the community (minimum one per county) to serve as locations for lifesaving/sustaining commodity distribution.
3. Activate MOUs to support PODs.
4. Activate and deploy any local caches of lifesaving supplies based upon need.
5. Notify the State Bulk Distribution Coordinator of locations of all activated PODs; communicate needs, including population seeking lifesaving commodities and current level of supply.
6. Initiate planning for continuous operations
7. Assess local restaurants, grocery stores, and food storage locations that are unaffected by the event and are near the impacted area for viability, and incorporate them into the distribution process

Feeding

1. If shelter seeking population is anticipated, or if need has already materialized, activate the local Feeding Task Force to project feeding requirements, identify shortfalls and prioritize requests.
2. Seek NGO assistance, deploy available assets, and activate kitchens, using field kitchens if necessary, to feed victims and emergency field personnel. Initiate phased approach to local feeding.
3. The phased approach begins with distribution of shelf-stable meals and life sustaining supplies, and progresses, as infrastructure restoration allows, to prepared meals from mobile kitchens or caterers.
4. Preparing meals requires that feeding equipment, such as large kitchens and the supporting equipment, be brought into or near the affected area. Organizations such as the Southern Baptists and Salvation Army will assume a major role in supporting this effort. Additionally, ARC works with the State and U.S. Department of Agriculture (USDA) and private vendors at the local, state, and national levels to secure feeding resources.
5. Work with transportation partners to ensure viability of roads and bridges before instituting vital supply lines and attempting to transport feeding resources into the affected area.
6. Notify SEOC of feeding operations, projections, and response planning. Communicate needs regularly.

Evacuation

1. Local officials will implement evacuation and proceed using local resources.
2. Implement notification procedures and ensure appropriate key personnel are provided with pertinent information concerning situation, task, and/or deployment requirements.

3. In coordination with the SEOC, the local EMD will make an evacuation determination based upon need; initiate immediate assessment of impacted and displaced populations. Once extent of impact has been determined, the local jurisdiction will initiate appropriate protective measures.
4. The local EMD, in conjunction with the Local Mass Care Coordinator, will implement one of the following protective actions, based upon the impact of the incident:
 - a. Shelter-in-place:
 - i. Operate designated shelters in the affected area, if the shelters have not been damaged or destroyed.
 - ii. Support loose groups of individual shelters or group tents erected in the affected area but loosely organized into family or non-congregate areas (these temporary shelters provide minimum shelter but the affected population must rely on bulk distribution from PODs for commodity supply).
 - b. Evacuation:
 - i. Operate shelters outside of the affected area to where the affected population can move or be moved if homes and infrastructure are damaged or destroyed.
5. Once local evacuation is initiated, jurisdictions must be prepared to determine local evacuation routes. These routes should be selected with consideration to the state-supported primary and secondary evacuation routes discussed above. Local jurisdictions should:
 - a. Designate local primary and secondary routes.
 - b. Monitor routes to ensure their safety and provide assistance for transit, as necessary.
 - c. Accommodate a surge of self-evacuees immediately post-incident.
 - d. Establish an EAS at an easily accessible area, capable of providing mass care if evacuation is delayed or stopped.
 - e. Identify those without means to evacuate. Transportation-assisted evacuees should be moved to an EAS and then to a CAS for evacuation. Accommodations should be made for those with access and functional needs.
 - f. Immediate assessment should be conducted of those individuals requiring transportation assistance. Individuals requiring medical and life saving services should receive priority use of limited evacuation assets.
 - g. Local transportation assets, contract agreements, and mutual aid agreements should be assessed and activated; missions should be assigned accordingly.
 - h. Public information should be coordinated and should direct evacuees to areas not impacted by the incident.
 - i. Forward requests for discipline-specific resources related to care and shelter, but not available within the operational area, to the relevant regional mutual aid coordinator (fire and rescue, law enforcement, coroner/medical examiner, or medical/health).
 - j. Forward to the State all other requests for resources not available within the operational area.
 - k. Locate and assess schools that can shelter-in-place and are awaiting student release to authorized caregivers. Coordinate with the ARC or other local agency to provide support.
 - l. Local school districts will have a plan in place to shelter-in-place students and staff who are at school when the earthquake occurs.

- m. Gather and analyze situation information and submit status reports to the SEOC. Provide SITREPs and administrative reports as required to the SEOC.

State Mission-essential Tasks

Following the occurrence of a NMSZ event, state ESF-6 operations will be comprehensively activated. Response participation will be required from the entire mass care response community, including:

1. Governors Faith Based and Community Service Partnership for Disaster Recovery (and its committees)
2. The Missouri Voluntary Organizations Active in Disaster (MOVOAD) and its committee
3. The State Mass Care Committee (STAMACC)
4. The Missouri Interfaith Disaster Response Organization (MIDRO)
5. The Faith-based Organization Disaster Initiative Committee
6. The Animals in Disaster Planning Action Committee
7. Other groups.

Initial focus will be to:

1. Implement notification procedures and ensure appropriate key personnel are provided with pertinent information concerning situation, tasks, and/or deployment requirements.
2. Determine evacuation and mass care requirements based on available information from incident commanders, SACCs, and local jurisdictions.

Congregate Care Sheltering

Missouri Department of Social Services

1. Based out of the SEOC, the ESF 6 sheltering lead will activate systems to support the local sheltering efforts.
2. Support the disaster response operations of the local jurisdictions within the operational area, on request.
 - a. Activate ESF-6 sheltering lead and initiate communication with local jurisdictions, both within and outside the impacted area.
 - b. Assist local jurisdiction to identify facilities suitable for temporary lodging, feeding, and bulk distribution if not already done.
 - c. Establish ESF-6 operational periods and standardized methodology of communication.
 - d. Initiate contact with LOMACCs.
3. Activate the MCERT, support local shelter operations, and assist in determining the access and functional needs of the impacted population, on request.
4. Assess need for CAS; if regional evacuation is required, placement of Consolidation Collection Site should take immediate precedence. Location should be coordinated with the local jurisdictions.
5. Respond to mutual aid requests from local governments; coordinate and adjudicate as capable.
6. Activate NGOs, FBOs, CBOs, and other partner agencies engaged in SEOC operations. Coordinate and liaison with MOVOAD for provision of services at mass care sites

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7. Determine impact on populations, assess need, and participate in the development of incident action plans (IAP).
8. Provide and receive reports and updates as required from various agencies (e.g., USGS, FEMA, DOD, State EOC[s]).
9. Ensure that shelter activity is tracked. Local EMDs will be asked to report shelter status to the SEOC.
 - a. ARC will provide shelter information to the SEOC; ESF-6 will ensure all shelter data are entered into the Functional Needs Support Services (FNSS) on a regular basis for situational awareness at the SEOC. These reports will be used in part to determine the need to open additional shelters throughout the State.
10. In coordination with ESF-2, deploy interoperable communications resources to meet mass care emergency responder requirements.
 - a. The LOMACC will work with the local Emergency Management Agency to ensure that radios used in the mass care operations are compatible with other emergency communication or provide access to equipment that will allow interoperable linkage.
11. Develop response plans with local jurisdictions to meet the needs of unaccompanied minors.

State Emergency Management Agency

Coordinate public information related to sheltering with the Joint Information Center (JIC) at the SEOC; local jurisdictions will be engaged through the local EMD and the Regional Information Coordinator.

Missouri Department of Health and Senior Services

1. Assist with implementation of plans to address the evacuations and sheltering needs of individuals with access and functional needs.
2. Activate plans for placement of one or more Federal Medical Stations (FMS) in Missouri, should such a federal asset be determined necessary by the State.
3. Support local jurisdictions in meeting the FNSS of individuals seeking shelter. This may include seeking assistance from federal assets or surrounding states.
4. Activate Show-Me Response in order to identify available healthcare professionals who may be deployed during an emergency event, if such assistance is necessary locally or regionally.

Missouri Department of Mental Health

1. Support local jurisdictions in meeting the need for behavioral health (including substance abuse and mental health services) in congregate care settings and support needs for persons with developmental disabilities in congregate care settings.
2. Coordinate the deployment of behavioral health assistance to consolidated assistance sites as available and needed.
3. Upon activation of Show-Me Response (SMR), activate the DMH unit of SMR to identify behavioral health professionals who may be deployed during an emergency event, if such assistance is necessary locally or regionally.
4. Coordinate with local and state officials for the evacuation of DMH facilities from Southeast Missouri and St. Louis and receiving sites for temporary relocations.

Household Pets

Missouri Humane Society

1. Work with the State ESF-6 lead to incorporate into overall ESF-6 operations.
2. Activate resources and establish a call center to provide support for local jurisdictions within the impacted area sheltering household pets.
3. Coordinate with the USDA and relay information on scope of impact, and activate the National Veterinary Response Team (NVRT).

Bulk Distribution

Missouri Department of Social Services

Activate the ESF-6 bulk distribution lead in the SEOC to support the local efforts to the extent possible.

The Salvation Army or Bulk Distribution Lead

1. Deploy state personnel and resources to bulk distribution facilities when requested.
2. Review procedures for reporting status of mission assignments with focus on resources committed and expenditures.
3. Support the establishment of at least one POD per affected county.
4. Secure stable supply and distribution routes to shelters and population's sheltering-in-place; access appropriate ground and air transportation working with ESF-1 (Transportation).
5. Coordinate with State Logistics Coordinator to meet local needs.
6. Make full use of voluntary agency capacity to support bulk distribution operations.
7. Ensure essential emergency supplies are stocked and pre-positioned to expedite delivery, when possible.
8. Activate Annex U, Donations and Volunteer Management.
9. Coordinate with Statewide Volunteer Coordinator.

Feeding

The Salvation Army or American Red Cross

1. As needed, implement the State Feeding Task Force to support feeding assistance:
 - a. The State Feeding Task Force should facilitate coordination among the various organizations/agencies participating in feeding operations. These organizations and agencies include: federal, state, tribal, and local government entities, NGOs, and national and state VOADs member organizations and other volunteer organizations involved with feeding operations and the private sector.
 - b. Facilitate local request for feeding material resources first through partner agency resources and then, if need exceeds the capability of partner agencies, request assistance through SEMA Logistics.
 - c. Missouri Southern Baptists are a primary support.
2. Respond to request of local jurisdictions for feeding resources.

Evacuation

State Emergency Management Agency

1. Convene the EMT. The Governor’s Office has the primary responsibility to order evacuation; however, the EMT will serve as the technical expert providing recommendations on course of action. The EMT will:
 - a. Coordinate with the SEOC, Area UC, and the local jurisdictions.
 - b. Determine evacuation and mass care requirements based on available information from incident commanders, SACCs, and local jurisdictions.
 - c. Make a recommendation on the implementation of regional evacuation. Work with local jurisdictions to understand the current extent of localized evacuation.
 - d. Coordinate with the affected jurisdictions regarding dissemination of appropriate public information. This will be outlined in detail in the ESF-15 appendix.
 - e. Request road signage, including quantity, location, messaging, Intelligent Transportation Systems (Kansas City SCOUT, St. Louis Gateway Guide, and Springfield Ozarks Traffic Information).
 - f. Coordinate with the EOCs of the impacted countries to develop a regional traffic flow plan.
 - g. Establish evacuation routes, traffic flow, and methods based on information provided by the impacted jurisdictions, local law enforcement, MSHP, and MoDOT.
 - h. Activate and select appropriate location for CASs to assist in the transportation and short-term shelter of evacuation-assisted evacuees. Once location is determined, local jurisdiction coordination will be sought to deploy the CAS.
 - i. State should route most transportation assets to these locations for pick-up and departure of the evacuating population.
 - ii. Working with ESF-8, provide limited mass care, medical and mental health assistance.
 - iii. Activate Evacuee Assistance Centers
2. Coordinate with the EMT in implementing a reporting system for reporting the number of shelters spaces available by county, and the number of evacuees in shelters by county at regular intervals.
 - a. Continue reporting for the duration of the emergency and for as long as shelters are operational.
3. Facilitate employment of mutual aid agreements for accessing evacuation support, to include transportation assets for those survivors requiring transportation assistance.
4. The staff of the SEOC will monitor and coordinate evacuation operations and other situations as these develop.

Missouri Department of Public Safety

1. The Missouri Information Analysis Center (MIAC) will coordinate with the MoDOT Damage Assessment Team to determine what transportation infrastructure has been damaged and what evacuation routes are available (see ESF-5).
2. Identify and coordinate evacuation staffing requirements appropriate to the emergency situation.
3. Process request for state evacuation assistance by coordinating development of support recommendations by appropriate support agencies and by presenting the most feasible

recommendations to the designated direction and control authority for a possible mission assignment.

4. Assume responsibility for command, control, and communications, as well as other operational tasks as directed by the Governor, during evacuations and other related disaster response operations.
5. Hold regular conference calls between the EMT, potentially affected local emergency operations centers, and appropriate state and federal agencies as the degree of threat to Missouri and the potential for escalation increase.
6. Coordinate with the local emergency management agencies as to whether the hazard will require coordination and implementation of protective actions including evacuation across multiple jurisdictions.
7. Begin implementation of the regional evacuation process:
 - a. Conduct evacuation of medical, access and functional needs population out of impacted area.
 - i. Perform assessment of vulnerable populations within the impact area; determine which individuals need to be evacuated.
 - ii. State and federal ESF-6 and ESF-8 officials will determine where this population will be moved and the mode of transportation and professional supervision required.

Missouri Hospital Association

Assist the SEOC in identifying private facilities that care for clients with access and functional needs.

Federal Mission-essential Tasks

Federal Government resources for mass care are organized under ESF-6 – Mass Care, Emergency Assistance, Housing, and Human Services.

The State will designate an official representative to coordinate federal mass care, emergency assistance, housing, and human services assistance. This official will serve as the principal point of contact with the RRCC ESF-6 Branch, and JFO, once established.

Team Deployment

Upon notification by the FEMA Region VII that the RRCC is being activated, the ESF lead, FEMA Recovery Division/IA and support agency, the ARC, will send representatives to the RRCC within 2 hours of notification. Further deployment to the RRCC of supporting ESF-6 partners will be at the discretion of the lead agency, FEMA, and may include the following organizations: USDA, DOD, MDHHS, DHS, U.S. Department of Housing and Urban Development (HUD), U.S. Department of the Interior, U.S. Department of Justice (DOJ), U.S. Department of Labor, DOT, U.S. Department of the Treasury, U.S. Department of Veterans Affairs, General Services Administration (GSA), Small Business Administration, Social Security Administration, U.S. Postal Service, ARC, Corporation for National and Community Service, NVOAD, and other volunteer agency and NGO support organizations (state VOADS).

Working closely with Missouri SEMA, in addition to the traditional state liaison position, FEMA Region VII will identify and deploy an ESF-6 Mission Planning Team (consisting of FEMA staff as well as ARC) to the SEOC. This high-level decision making entity consisting of representatives from FEMA and ARC and will work closely with the Incident Management Assistance Team (IMAT). They will also

assist in development of IAPs, as defined under the National Incident Management System (NIMS), as these pertain to ESF-6.

Congregate Care Sheltering

Federal Emergency Management Agency

1. Coordinate with State to evaluate the need to activate IA-Technical Assistance Contract (TAC) for mass care services.
2. Establish and maintain communication with state counterparts relating to congregate care sheltering.
3. Fund support agencies in sufficient time to allow for the execution of ESF-6 activities.
4. Ensure that other ESFs deliver adequate response in sufficient time for successful completion of ESF-6 activities.
5. Coordinate overall federal efforts associated with mass care, emergency assistance, housing, and human services.
6. Collaborate with the State to reunify separated family members.
7. Establish priorities and recovery activities based on incident information and availability of resources.
8. Facilitate the process by which NGOs providing mass care services request resource support from the ESF-6 FEMA coordinator, through coordination with the FEMA Voluntary Agency Liaison and MDSS.
9. Assist in provision of medical supplies and services.
10. Support determination of the functionality and safety status of pre-identified mass care, emergency assistance, housing, and human services facilities, including food and water capabilities.
11. Determine each local jurisdiction's capabilities. This function will be critical depending upon the current/projected weather conditions in the affected areas, and can greatly impact the ability to save the lives of individuals already injured, as well as those who were not previously injured directly by the initial earthquake or aftershocks.
12. Provide cots, blankets, clothes, personal hygiene items, etc.
13. Provide shelter managers and other volunteers necessary to provide mass care.
14. Establish a shelter/survivor registry.
15. Provide public information regarding ESF-6 related services.
16. Provide daily SITREPs on ESF-6 activities to ESF-6 primary and support agencies.
 - a. Disaster Assistance Division, Individual Assistance will consolidate situation reports and provide them to RRCC planning, as determined by the RRCC operation.
 - b. Disaster Assistance Division, Individual Assistance leadership will appoint an IA Branch Chief to oversee the Mass Care and Emergency Assistance Group within the RRCC until transition to the JFO occurs.
 - c. FEMA Region VII Recovery Division/IA will work with IMAT IA team members, other field teams (state liaisons, Emergency Response Teams, etc.), as well as VOADs for

consolidation and compilation of
ESF-6 materials.

17. The Region VII Volunteer Agency Liaison is located in the IA Branch of the Recovery Division, and is responsible for NGO and VOAD coordination primarily ESF-6 Mass Care and Emergency Assistance. FEMA NGO coordination initiated by the Voluntary Agency Liaison includes the following:

- a. Coordinate federal support for NGO volunteers and programs.
- b. Monitor activities of volunteer agencies preparing for and responding to events/incidents.
- c. Identify possible federal resources which may be mission assigned as needed to support ESF-6 activities.
- d. Report federal activities to volunteer agencies and vice versa.
- e. Coordinate mass care activities with ESF-6.
- f. Monitor the National Shelter System for ESF-6 mass care activities
- g. Support state VOADs in responding to disasters.
- h. Coordinate services of volunteer agencies to meet the needs of access and functional needs clients.
- i. Establish contact with the field, ESF support agencies, and other activities requiring interaction during the RRCC and JFO operations.
- j. Notify the NRCC staff of pre-identified key volunteer agencies of activation.
- k. Provide Planning Section accurate and timely input for SITREPs and briefings for input into Emergency Management Information Management System.
- l. Advise volunteer agencies on status of major RRCC operations.
- m. Share preliminary damage assessment figures and other impact information between federal and volunteer agencies.
- n. Coordinate to set FEMA donations policy for the disaster.
- o. Encourage use of the National Donations Management System for Donations Management.
- p. In coordination with the state Volunteer Agency Liaison, determine whether to establish the 1-800 donations hotline service or to record donations information directly at field locations.
- q. Ensure all donations and offers from the hotline are shared with state and federal donations managers in the field.
- r. In coordination with the state Volunteer Agency Liaison, manage large donations from the donor to the recipient states.

American Red Cross

1. Provide ARC personnel to staff DHS/FEMA regional offices in support of ESF-6 mass care activities.
2. Deploy specially trained liaisons to work at designated DHS/FEMA locations to support ESF-6 mass care activities, as requested.

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3. Provide subject-matter expertise on regulations, policy, and relevant ARC issues and activities, as requested.
4. Provide guidance to designated state lead agencies for mass care, as the state determines its needs for federal resource support.
5. Promote cooperation and coordination among government and national-level NGOs providing mass care services
6. Support reunification efforts through the “Safe and Well” website and in coordination with government entities as appropriate.
7. Support reunification programs in general population shelters operated by the ARC.
8. Utilize the National Shelter System for reporting on all ARC managed and partnered shelters.
9. Assess the consequences of an event/incident in conjunction with the government and NGO partners at all levels to coordinate in provision of timely and efficient mass care services.
10. Work with the state lead agency for mass care to determine the need for and help facilitate any federal resource requests for mass care items approved by FEMA.

The Salvation Army

1. Provide personnel in support of ESF-6 mass care activities; deploy liaisons to work at designated DHS/FEMA locations to support ESF-6 mass care activities, as requested.
2. Provide subject-matter expertise on regulations, policy, and relevant Salvation Army issues and activities, as requested.
3. Provide guidance to designated state lead agencies for mass care as the State determines its needs for federal resource support.
4. Promote cooperation and coordination among government and national-level NGOs providing mass care services
5. Respond to request of local/state chapters/jurisdictions for resources.

Corporation for National and Community Service

1. Roster teams of trained National Service Participants to complete recovery support activities emphasizing disadvantaged communities and access and functional needs residents, including:
 - a. Conduct a canvassing needs assessment, and information distribution support for state and federal operations.
 - b. Provide shelter and feeding support; distribute water, food, ice, and other emergency goods.
 - c. Support tracking of evacuees
 - d. Support unaffiliated volunteers and warehousing assistance.
 - e. Support registration and call center.
 - f. Provide case management assistance.
 - g. Perform other appropriate activities identified by ESF-6 coordinators or DHS/FEMA Voluntary Agency Liaisons.

National Voluntary Organizations Active in Disaster

1. Facilitate and encourage collaboration, communication, cooperation, and coordination among NGOs participating in response efforts.
2. Implement a plan to assist in communicating to the government and general public the services provided by its national member organizations.
3. Facilitate information sharing after an incident.
4. Provide members with information pertaining to the disaster's severity, needs identified, and actions of volunteers throughout the response, relief, and recovery process.
5. Provide guidance in sharing client information, promoting spiritual and emotional care, and managing unaffiliated volunteers and unsolicited donated goods, as needed.
6. Participating organizations and services provided include:
 - a. Ananda Marga Universal Relief Team
 - i. Provide food and clothing, shelters, and counseling in the affected area as requested.
 - b. Catholic Charities, USA
 - i. Provide assistance to communities in addressing family crisis and recovery needs as requested.
 - ii. Provide counseling programs for children and the elderly, and special counseling for disaster relief workers as requested.
 - c. Christian Disaster Response
 - i. Provide initial on-site disaster assessment program as requested.
 - ii. Provide in-kind donations supplies as requested.
 - d. Christian Reformed World Relief Committee
 - i. Assist churches in the disaster-affected community to respond to local needs of persons.
 - e. Church of the Brethren Disaster Response
 - i. Train volunteers through the Cooperative Disaster Child Care Program to establish child care centers following the incident in the affected area as requested.
 - f. Church of Scientology Disaster Response
 - i. Assist relief crews in providing food and water.
 - ii. Provide emotional and spiritual care.
 - g. Church World Service
 - i. Seek out unmet needs of all survivors – particularly people who were vulnerable and marginalized before the disaster.
 - h. Disaster Psychiatry Outreach
 - i. Provide education and training in disaster mental health to a range of professionals in the emergency management sector.

Household Pets

Humane Society of the United States

1. Through the National Disaster Animal Response Team (NDART):
 - a. Serve as a resource for individuals, animal-related organizations, government agencies, and others concerned about the urgent needs of animals before, during, and after disasters.
 - b. Provide assistance with animal rescue, handling, and transport in a timely and humane way.
 - c. HSUS assists ESF-6 with coordination of other participating entities having an assistance animal-related mission.

Bulk Distribution

Federal Emergency Management Agency

1. As discussed in the Base Plan, FEMA ESF-7 has established the Catastrophic Incident Supplement (CIS) to the National Response Framework (NRF) that identifies packages of commodities and other resources which can be mobilized immediately.
2. FEMA will deploy these resources to Federal Mobilization Centers and Staging Areas in anticipation of requests from the State for these resources; logistical operations areas are outlined in Annex D along with projected resource requirements.

The Salvation Army

Provide emergency assistance including mass and mobile feeding, temporary shelter, counseling, missing person services, medical assistance, and the warehousing and distribution of donated goods including food, clothing, and household items.

American Red Cross

Provide support following or in anticipation of a declared disaster for sheltering, feeding, and emergency first aid; bulk distribution of emergency relief supplies; and acquisition of information to operate a Disaster Welfare Information System for the purpose of reporting survivor status and assisting family reunification.

Operation Blessing

Transport food and emergency supplies to disaster survivors.

International Aid

Provide food and medical supplies.

International Relief and Development

Distribute food and critical supplies.

Convoy of Hope

Use the fleet of trucks, 300,000-square-foot warehouse, and Mobile Command Center, and utilize the first response POD model to provide resources to survivors.

Adventist Community Services

1. Receive, process, and distribute clothing, bedding, and food products.

2. Provide emergency food and counseling, and participate in the cooperative disaster child care program.

America's Second Harvest

1. Collect, transport, warehouse, and distribute donated food and grocery products for other agencies involved in feeding operations and distribution of relief supplies through its national network of food banks.
2. Process food products collected in food drives by communities wishing to help another disaster-affected community.
3. Develop, certify, and support their food banks.
4. Serve as a liaison between the food banks and the donors.
5. Educate the public about the problems and solutions of hunger.

Episcopal Relief and Development

1. Send immediate relief grants for basics needs such as food, water, medical assistance, and financial aid within the first 90 days post-disaster.
2. Works primarily through Church World Service in providing its disaster-related services.

Feed the Children

Provide food, water, blankets, cleaning supplies, or other relief supplies to individuals and families affected.

Feeding

The Salvation Army

1. Provide emergency assistance including mass and mobile feeding, temporary shelter, counseling, missing person services, medical assistance, and the warehousing and distribution of donated goods including food, clothing, and household items.
2. Provide referrals to government and private agencies for special services.

Southern Baptist Convention Disaster Relief

1. Provide more than 200 mobile feeding units staffed by volunteers who can prepare and distribute thousands of meals a day.
2. Provide disaster child care. The agency has several mobile child care units.
3. Assist with cleanup activities, temporary repairs, reconstruction, counseling, and bilingual services.

Evacuation

Federal Emergency Management Agency

1. Support state requests when state, tribal, or local governments indicate that their resources may or have become overwhelmed and the Governor requests federal assistance, or when state and local governments are incapacitated, and the President directs that federal mass evacuation support is required.
2. Support state requests for support of suitable reception and care facilities.
3. Federal support of Forward Staging Areas and bulk distribution points will be identified as soon as possible.

4. Assess and support transportation routes (ingress and egress capabilities with the affected areas). Provide transportation to ESF-6 related services for those who have no means of transportation.
5. Gain comprehensive understanding of utility functionality status for electrical, gas, water, and sewer services

3.1.2.2 Phase 2b: Deployment

Purpose of Phase

The purpose of this phase is to deploy and employ necessary assets to sustain systematic mass care and evacuation operations scaled as closely as possible to the needs of the event.

End State of Phase

The desired end state of Phase 2b is the comprehensive employment and deployment of appropriate ESF-6 response resources, to include: congregate care sheltering, household pets, bulk distribution, feeding, and evacuation operations. Ongoing situational assessments should be performed; established lines of communication should be maintained.

Local Mission-essential Tasks

Congregate Care Sheltering

1. Ensure that identified shelters are established and operated in accordance with current guidance.
2. Notify the SEOC upon the opening of local shelters, evacuation assembly area, or causality collection sites.
 - a. Provide State ESF-6 lead: address, phone number, name of shelter manager, and number of shelter residents for each shelter in local jurisdiction.
3. Coordinate with the local shelter providers to open and manage shelters for local government using local supply caches stored in quantities and locations expected to meet immediate needs.
 - a. Timelines for supply use and exhaustion should be established and communicated to the SEOC.
4. Request security personnel for the shelter and care facilities, as needed (see ESF-13).
5. Ensure shelters have been assessed for environmental health issues, including food safety, sanitation, habitability, and epidemiological concerns.
 - a. If some of the primary shelters cannot be operated without environmental health concerns (i.e., dislodged asbestos), other shelters will be identified and inspected. Any additional shelters that need to be designated later will also be inspected by local public health.
6. Attempt to identify non-congregate care shelters (spontaneous shelters opening without organization); decide whether to integrate into the care and shelter system or encourage consolidation, absorbing the residents into congregate care shelters run by ARC or the local government. Ensure evacuee tracking system has been implemented and that related information is being forwarded to the SEOC in a timely manner to ensure accurate tracking of people, pets, and belongings. Ensure that adequate reporting is ongoing with SEOC and the ESF-6 Lead. Report number of shelter residents to the SEOC at assigned time each day.

Household Pets

1. Establish household pet shelter locations, co-located with congregate care shelters to the extent possible.

- a. Shelter operations will be conducted in accordance with the technical guidance provided by the Missouri Humane Society.
2. EMD will ensure household pet shelters will have a plan in place for animal waste and carcass disposal.
3. Deploy emergency veterinary services (utilizing local MOUs) for the purposes of:
 - a. Provision of assessment and treatment of minor illness and injuries
 - b. Diagnosis, triage, treatment, and stabilization
 - c. Vaccinations to protect both pets and people
4. Engage local NGOs, FBOs, CBOs and other response organizations.
5. Communicate gaps in personnel, equipment, and supplies to the SEOC. Detailed information on number and type of household pets requiring shelter should be communicated. This information should include:
 - a. Number of pets by species
 - b. Number of shelters
 - c. Locations of shelters.

Bulk Distribution

1. Operate established PODs. Operational periods should be established; these facilities should be staffed on an ongoing basis.
2. Activate bulk distribution plan.
3. Determine availability of refrigerated trailer storage and transport into the affected area, if needed. Coordinate with ESF-15 to ensure the population knows the location of the commodity distribution and how to obtain needed support. Implement plans to deliver supplies to homebound or rural populations that cannot reach POD locations, or move these people to an EAS for relocation to a more suitable location. The LOMACC should fully engage and coordinate with the local COAD and other NGOs, FBOs, and CBOs to provide bulk distribution services. Continue to work with the Statewide Volunteer Coordinator to employ volunteer workforce in distribution efforts. Local supplies should be continually assessed and timelines for exhaustion communicated to the SEOC. Work with the SEOC to develop a plan for continued provision of services within the impact area to extend the provision of service, even after the local supplies are distributed, until the need is met.

Feeding

1. Ensure the Feeding Task Force is fully operational
2. Ensure that adequate nutritional support is available for any sheltering population.
 - a. Deliver meals to populations if jurisdictions have chosen to support non-congregate sheltering.
3. The Feeding Task Force will prioritize feeding at consolidated congregate care sheltering.
 - a. Continuing operations may depend upon the availability of critical infrastructure. The Feeding Task Force should make considerations for portable assets that can supply these services.

4. The LOMACC should fully engage the local COAD and other NGOs, FBOs, and CBOs to provide feeding services.
5. The LOMACC should work with the Statewide Volunteer Coordinator to employ volunteer workforce in feeding efforts.

Evacuation

1. Designated local jurisdictions along the primary evacuation routes (see **Figure C6-6**) should establish ERSs for the evacuating population. These locations should at a minimum be capable of providing fuel and water for self-evacuees and transportation-assisted evacuees. If possible, food, toilet, shower, first aid, and pet care should be considered. However, it is understood that within the impacted area these resources may be diverted to lifesaving operations.
2. Establish a timely and organized method for accurate information dissemination among the evacuating population; methodologies and messaging should be communicated and coordinated with the SEOC on a regular basis. Information to be communicated should include:
 - a. The evolution of the characteristics of the hazard, cascading events
 - b. The designated evacuation area, initiation times, and resource mobilization status
 - c. The process of resource deployment
 - d. The current status of jurisdictional evacuation routes
 - e. The status of available public shelter, hotel space by location
 - f. Assessment of the need to terminate the evacuation prior to full completion (i.e., aftershocks)
 - g. Estimated time for completion of evacuation efforts
 - h. Information about search and rescue and reunification
3. Identify transportation assets and requirements for transportation-assisted evacuees and those with access and functional needs.
 - a. The local health departments and the MHSS will determine the transportation needs of the access and functional needs populations.
 - b. Bus and other transportation mutual aid agreements should be activated.
4. Each local jurisdiction within designated host jurisdictions will:
 - a. Coordinate host response activities including traffic management, host sheltering, and public information with all jurisdictions.
 - b. Activate and deploy a Reception Processing Center or Welcome Center to provide evacuee assistance and relocation assistance.
 - c. Identify any resource or other operations shortfalls that will require state support.
 - d. Host jurisdiction procedures will address:
 - i. Traffic Management Plans
 1. Traffic control points and the responsible agency for providing staffing and operational control
 2. Barricade plans including location and staffing
 - ii. Shelter Operations Plans

1. Identify specific actions to address staffing and other host shelter operational requirements, including shelter management/staff deficiencies and any phased opening of host shelters within the jurisdiction as a whole or within counties

iii. Public Information Plans

1. Include host shelter locations, Welcome Center or Reception Processing Center locations, information regarding shelter opening and closing, and directions to shelters from major evacuation routes.
2. Ensure hotel/motel capacity and status information is incorporated into emergency public information procedures
3. Pre-develop messages for release to the media.
4. Place variable message signs and formulate procedures for updating messages.
5. Place portable radio transmitters and formulate procedures for updating messages.
6. Provide maps, fliers, or other shelter information to local and state law enforcement/traffic control personnel, rest areas, and other key locations along major evacuation routes (restaurants, gas stations) both prior to and during the event
7. Coordinate refuge-of-last-resort procedures to address the possibility that evacuees may be stranded on evacuation routes, due to aftershock or some type of cascading event.
8. Participate on all state-initiated evacuation routes within the host jurisdiction.
9. Participate on all state-initiated evacuation coordination conference calls.
10. Exchange critical information with all jurisdictions via conference calls. Relay host jurisdiction information to the EMT.
11. Designate a public information officer (PIO) (Regional Information Coordinator), preferably a representative with no direct operational responsibilities, within the EOC in which he/she is located.
12. All counties will provide the following information to the EMT on a regular basis or upon significant changes to host jurisdiction operations:
 - a. Designation of a Host Region Information Coordinator
 - b. Need for an EMT liaison or additional personnel for acquisition and dissemination of information
 - c. Location, capacity, and status of host shelters
 - d. Locations of all variable message signs, host shelter information, or staging areas
 - e. Any reports from local law enforcement of road conditions or status that may impact host sheltering

- f. Resources needed from state agencies to support host response plans.

State Mission-essential Tasks

Congregate Care Sheltering

Missouri Department of Social Services

1. Continue coordination with the local jurisdictions in the affected area.
 - a. Monitor shelter capacity; location and operations will be obtained by the SEOC.
 - b. Develop real-time estimations of transportation-assisted evacuee movement and shelter operations utilizing FNSS and NMETS.
2. Deploy volunteer assets to assist in capturing information from local EASs and CASs, and load this into FNSS and NMETS.
 - a. Send this information to the SEOC for consolidated tracking.
3. At the request of the LEOC, ESF-6 will facilitate requests for security personnel for shelters and care facilities, in accordance with ESF-13.
4. The MCERT team will be fully deployed to assist with the identification of access and functional needs throughout the State. Refer to Operational Tool 6.5 for complete explanation of activities.
5. Once established, sheltering operations should be closely coordinated with ESF-7 Logistics, ESF-8 Health and Medical, and ESF-11 Agriculture.
6. Assist MDHSS in implementing local and state plans to address mass care requirements of individuals with access and functional needs (see Annex X).
7. Provide team members for the forward deploying MCERT.
8. Assist local jurisdictions in meeting the needs of children displaced from their families.

State Emergency Management Agency

1. Ensure a process is in place to provide intake and placement for spontaneous volunteers.
2. The local EOC, in conjunction with the local mass care and sheltering coordinator and other function leaders, will set up a system to use spontaneous volunteers. Processing and placement of these volunteers will occur with the deployment of a volunteer reception center by local jurisdictions, coordinated with the Statewide Volunteer Coordinator.
3. Continued assessment of evacuation operations should occur from the SEOC. Evacuee movement will require:
 - a. CASs: continued operations providing evacuee assistance, health and medical care, limited sheltering, and feeding. The State may be required to coordinate logistical needs from staging areas, non-medical staffing, patient tracking and sheltering supplies, to the extent possible.
 - b. ERSs: local jurisdictions should support these locations; however, in heavily impacted areas where critical infrastructure is damaged or non-functioning, state support may be needed. Staging areas need to be capable of delivering fuel and water to these locations, to the extent possible.

Missouri Department of Health and Senior Services

1. Medical needs will be addressed by ESF-8. The use of health and medical resources for hospital and assisted living evacuation operations will be augmented by ESF-6 to the extent possible.
 - a. The ESF-8 plan indicates that individuals requiring medical care will be evacuated directly to healthcare institutions which can provide the same or greater level of care.
2. If it is necessary for these individuals to be sheltered for a period of time in a medical shelter, the State should locate medical shelters, if opened, and, working through the ARC or other community agency, coordinate nonmedical support to the extent possible.

Missouri Department of Public Safety

The MDPS and Corrections have the primary responsibility for sheltering jail and prison inmates or evacuating inmates from the impacted area.

Missouri Department of Elementary and Secondary Education

Assist in acquiring school facilities for disaster response activities, including sheltering operations.

American Red Cross

1. Will operate designated shelters in the affected area if the shelters have not been damaged or destroyed. Normal locations are schools, universities (dormitories, gymnasiums), churches, and other buildings where the ARC has a written use agreement. If shelters are damaged by the event, building inspectors will have to inspect each shelter building before use, thereby denying immediate use of the shelter location.
2. ARC will operate shelters outside of the affected area to which the affected population can move or be moved in the event homes and infrastructure are destroyed.
3. Conduct shelter and mass care operations.
4. Provide welfare inquiry services.
5. Provide first aid at feeding sites and shelters, as appropriate.
6. Assist in locating a source for procuring, transporting, storing, preparing, and distributing emergency food, water, and ice supplies.
7. Provide mobile and fixed feeding capabilities, as appropriate.
8. Coordinate with ESF-7 Logistics as staging areas are established for resupply of mass care sites, in conjunction with SEMA and other NGOs. These sites include, but are not limited to: household pet shelters, congregate care shelters, EASs, Causality Collection Sites, and ERSs.
9. Provide members for the forward deploying MCERT team(s).

The Salvation Army

1. Provide individual and mass feeding.
2. Provide and operate emergency shelter facilities.
3. Assist in the registration of victims and emergency workers.
4. Provide members for the forward deploying MCERT team(s).

Missouri Department of Natural Resources

Provide parking and lodging in state parks and on state land for disaster victims and their vehicles, as appropriate.

Household Pets

Missouri Humane Society

1. Ensure comprehensive implementation of pet care throughout the evacuation process for transportation-assisted evacuees and within host communities or the sheltering of animals.
2. Determine logistical needs of sheltering pets.
3. Request needed commodities from donated goods or from ESF-7.
4. Develop a coordinated means of providing information to locations of pet-friendly shelters. Communicate information from both within the impacted area and along the evacuation route.
5. Deploy Veterinary Medical Assistance Teams to larger shelters. Develop visibility of all pet sheltering operations throughout the State.

Bulk Distribution

Missouri Department of Social Services

1. Augment local PODs responding to requests for assistance.
2. The Bulk Distribution Coordinator develops long-term projections of supply demand and coordinates with FEMA for donations and/or purchase of supplies.
3. Track bulk distribution activity through input of information into the FNSS from local jurisdictions. Local Emergency Management Offices will be asked to report status to the SEOC.

State Emergency Management Agency

1. Respond to requests to provide security personnel for bulk distribution facilities (see ESF-13).
2. Work with ESF-17, Humane Society of Missouri, to provide pet supplies for rescue, and care shelter and essential needs of companion animals and service animals owned by disaster victims.
3. Coordinate with Missouri Public Private Partnership (MOP3) to provide contacts with the business community for donations and/or purchase of supplies.
4. Work with the Statewide Volunteer Coordinator and the Bulk Distribution Coordinator on receiving and distributing bulk donated goods. Activities include:
 - a. Ensure a process is in place to handle in-kind donations.
 - i. State and federal ESF-6 and ESF-7 branches will establish a donations coordination program. For the State, this program is guided by the Volunteer Donations Coordination Team. In addition to the appointment of a Statewide Volunteer Coordinator, this team will designate a physical location for registration of in-kind donations before the team is placed in the field the Multi-Agency Donations Warehouse. This concept is fully outlined in Annex U of the SEOP.
 - b. Ensure donations of prepared meals are from commercially certified sources.
 - i. The LOMACC and the Feeding Task Force will designate a person to coordinate donation of prepared meals. All such meals must be prepared in commercially certified sources. Assurance of this operation will be provided by the State Feeding Task Force and the ESF-6 Lead.

- c. Coordinate international offers with the Department of State.
 - i. Working with the Statewide Volunteer Coordinator and the Bulk Distribution Coordinator, the Federal Donations Coordinator will act to coordinate any international donation offers.

The Salvation Army

1. Serve as a member agency of the MOVOAD and SEMA. Provide a trained liaison to manage Salvation Army operations at the SEOC.
2. Assist in locating a source for procuring, transporting, storing, preparing, and distributing emergency food, water, and ice supplies.
3. Provide on-site assistance to disaster workers and survivors.
4. Assist in administration and supervision of disaster relief operations and POD provisions of basic needs supplies such as food, water, and clothing.

Feeding

Missouri Department of Social Services

1. Augment and facilitate effective provision of nutrients to the evacuating and sheltering population, to the extent possible.
2. SEOC will contact EOCs in the affected local counties to determine what shelters have been set up, what mass feedings have begun, and what assistance is needed to continue the activity.
3. Receive requests for assistance from the local feeding task forces; process and prioritize.
4. Establish operational periods for the State Feeding Task Force; action planning and long-term projections should occur. Logistical needs should be communicated to SEMA and FEMA Logistics.
5. Develop long-term projections for feeding.
 - a. Longer term projections and assessments should include determining what feeding efforts have been initiated at community shelters and can be continued in the short term.
 - b. Determine how much additional food and other commodities will be needed over the next 24, 72, and 120 hours.
 - c. Determine Meals-Ready-to-Eat (MRE) or other shelf-stable food availability.
 - d. Determine critical community needs, such as water, ice, and infant food. Initiate procurement of identified needs.
 - e. Determine level of support provided by critical infrastructure. If utilities will be out for longer than 5 days, assess need to begin feeding operations in impacted neighborhoods, to include distribution of bulk foods.
6. The State Feeding Task Force will facilitate use of and access to USDA commodity foods program; outreach to ESF-11 will occur through the SEOC initially and then directly through the State Feeding Task Force.
7. Submit request for federal assistance when state-level resources are insufficient. Utilize pre-scripted mission requests (see Section 6.0 for complete list).
8. Engage state-level NGO participation and any national-level NGO requests.

Missouri Department of Health and Senior Services

Coordinate public health issues relating to safety of drinking water and food, and disposal of contaminated or unsafe products.

The Salvation Army

Assess and plan for feeding, determine operational needs, and coordinate with state partners to provide resources. Track statewide feeding statistics

Evacuation

Missouri Department of Social Services and Missouri Department of Public Safety

1. Notify all counties potentially involved in the response, and request that the Governor declare a State of Emergency.
2. Utilize EMT to develop recommendations for State UC. Consider if safe regional ground evacuation is feasible; consider alternative routes of evacuation (air, rail, etc.) as appropriate
3. Coordinate evacuation of medical patients in conjunction with ESF-8.
4. Coordinate establishment and support ERSs along designated evacuation route; coordinate with local jurisdictions.
5. Coordinate prioritization of evacuation based on which jurisdiction(s) are most impacted.
6. The EMT and the affected local jurisdiction EOCs will initiate regional evacuation, including deployment of personnel and equipment resources, if applicable.
7. Under circumstances involving evacuations of multiple jurisdictions, the EMT may recommend to the Governor that a state-directed evacuation is necessary. At the Governor's direction, language will be included in the Governors Executive Order identifying evacuations and directing a coordinated, regional response from the SEOC involving all state and local response agencies.
8. The EMT and LEOCs will monitor the progress of the regional evacuation and exchange information on an established time schedule to promote effective coordination by all involved jurisdictions.
9. The EMT and LEOCs will coordinate efficient deployment of resources when needed and utilization of available evacuee shelter capacity, and effectively address modification to evacuation routes, if necessary.
10. A process for routine communication and coordination will be initiated by the EMT and all involved LEOCs.
11. If alternate routes, actions or resource deployment can be pre-planned to address these possibilities, appropriate procedures will be included within this appendix. For unanticipated events, the EMT will work with the affected LEOC and all relevant agencies at the time to make adjustments in the regional evacuation in accord with the guidance provided in this section. In the event of a physical blockage of a regional evacuation route, the LEOC with jurisdiction will coordinate with the EMT and other counties, as necessary, to remove the blockage. If removal is not feasible, the EMT will coordinate with all affected LEOCs to plan and implement alternative routing.
12. Several situations could halt the movement of people from the impacted area. For instance:
 - a. Aftershocks
 - b. Cascading events (hazardous materials [HAZMAT], bridge failure, etc.)

- c. Blockage or excessive vehicle congestion on a regional evacuation route
 - d. Filling of all available capacity at public shelters and hotels/motels in host counties
 - e. Hazardous conditions impacting evacuees
13. In some instances, it may be prudent for the EMT to consider implementing contra flow. If decided upon, MoDOT will assume the lead role in initiating these efforts. MoDOT will be assisted by the MDPS and MONG.
14. The EMT and local response agencies will monitor the progress of evacuation, and exchange current information on the level of traffic on regional routes and utilization of space in public shelters.
15. Direct evacuation and sheltering of persons having mobility limitations, including persons in nursing homes, hospitals, group homes, and non-institutionalized persons. See ESF-8 plan for specific detail.
16. Host Response Operations
- a. A regional evacuation will generate impacts outside areas immediately at risk and may necessitate use of local resources in non-threatened jurisdictions to support the response. The EMT will determine if activation of response operations in designated host jurisdictions, outside the immediate area of impact, is necessary. If so, the EMT, in conjunction with the Governor's Office, will direct the assistance of any or all local governments within the State of Missouri, and request, as needed, adjacent state and local emergency management agencies to support the regional evacuation as follows:
 - i. The EMT will designate, through a state mission, host jurisdictions to implement protective actions in support of evacuations. All LEOCs within designated host jurisdictions will activate and prepare to initiate host response plans.
 - ii. The EMT will coordinate traffic management issues with state and local law enforcement from all counties within host and risk jurisdictions.
17. In support of host response operations, the EMT shall, at a minimum, make the following information available to host jurisdictions, including those in other states, on a continuous basis or when warranted by the situation:
- a. DOT real-time traffic counter data for roads within the host jurisdictions or on all roads leading into the jurisdiction
 - b. Traffic routes
 - c. Any significant changes to the situation in adjoining counties that may impact host sheltering operations
 - d. The content of any public information released by state agencies
18. Ensure that provisions for support to evacuees with access and functional needs are being addressed. Initiate resourcing if not.
- a. State officials need to develop a plan to identify, transport, and shelter access and functional needs populations.
19. Provide communications resources required to establish Incident Command for each mission area.

REDACTED

- a. Communications will be through a variety of means, including messenger, telephone, agency-specific radios, amateur radio, and e-mail. The LEOC will coordinate communication resources to ensure communications to and from each shelter and the LEOC. If the LEOC is unable to provide these resources, it will request assistance from the SEOC.
20. Determine if local support agencies are engaged in providing support to access and functional needs population housing and reentry.
 - a. The State ESF-6 and ESF-8 officials will support local efforts to accommodate access and functional needs populations in local settings if possible.
21. Determine if a communication system is in place to disseminate information about spontaneous volunteer opportunities and services.
 - a. State and local emergency management agencies to the extent possible should track spontaneous volunteers during the response and recovery phases of the disaster.

Missouri Department of Public Safety

1. Coordinate traffic management over designated evacuation routes during multi-jurisdictional evacuations.
2. Coordinate with DHS to expedite the flow of traffic on evacuation routes. Assist in developing traffic management plans to accommodate increased volume.
3. Gather information from support agencies and provide situation reports as required by operational procedures, MDPS directives, and as requested by the appropriate direction and control authority.
4. Develop and maintain comprehensive area-wide/statewide traffic management plans with MoDOT to support large-scale, inter-jurisdictional evacuations.
5. Within capabilities, coordinate resource needs to assist local governments in conducting evacuations and mass care operations.
6. Once evacuation operations are implemented, ensure other appropriate jurisdictions are aware of the operations in progress.
7. Provide for the safe and expeditious flow of traffic out of the threatened areas and through adjacent jurisdictions.
8. Take immediate actions as needed to ensure continued, expeditious traffic movements out of areas of risk, to include emergency rerouting of evacuating vehicles.
9. If traffic is obstructed, the EMT will direct evacuees to a refuge of last resort until the route can be restored.
10. MoDOT and law enforcement authorities will control evacuation traffic from the point it enters the evacuation route network.
 - a. Priority will be given to residents of the most severely impacted area.
 - b. Impacted counties/cities will prepare to activate last resort refuges.
11. Provide members for the MCERT.

Missouri Department of Elementary and Secondary Education

Work with public independent school districts to provide school buses to assist in the evacuation of persons without transportation, including individuals with accessible transportation needs.

Missouri Department of Corrections

1. Maintain evacuation plans for all state correctional facilities in the evacuation zones, and when warranted, ensure inmates are appropriately evacuated to safe facilities in accordance with applicable laws, MDC directives, and operational procedures.
2. Provide available MDC personnel and offenders as manpower, and provide equipment to assist in provision, transportation, storage, and distribution of food, water, and/or ice supplies.
3. Within capabilities, conduct emergency feeding operations, if requested. This provision is contingent on the department's mission requirements.

Missouri National Guard

1. Provide military support as requested by the SEOC.
2. Provide transportation and member(s) for the forward deploying MCERT team(s).

Missouri Department of Mental Health

Within capabilities, conduct emergency feeding operations as facility and staff may be available and as requested. This provision is contingent on the department's mission requirements and degree to which emergency event has compromised facilities ability to meet its own operational needs.

Federal Mission-essential Tasks

Federal Emergency Management Agency - ESF-6

1. ESF-6 backup will consist of additional ESF-6 resources that are listed as available in the NRCC. Upon arrival at the RRCC, the ESF Lead Agency should coordinate with the following ESFs to ascertain the actual capabilities to provide supplemental mass care, emergency assistance, housing and human services:
 - a. ESF 1 (Transportation) – What are the ingress/egress capabilities within the affected areas?
 - b. ESF-2, Communications – What communications capabilities still exist within the affected areas? If normal communications capabilities (telephone, cellular, radio) exist, attempt to determine the status of pre-identified shelter facilities within each local jurisdiction. If normal communications capabilities do not exist, amateur radio should be utilized to determine the status of these facilities.
 - c. ESF-3, Public Works – What is the status of water and sewer utilities in the affected areas?
 - d. ESF-7, Logistics Management and Resource Support – What critical resources are available to support provision of mass care, emergency assistance, housing, and human services (food, water, ice, emergency power, cots, blankets, etc.)? Begin processes to obtain needed resources and movement towards forward staging areas or local staging areas if accessible.
 - e. ESF-12, Energy –What is the status of the provision of electrical and gas services in the affected areas?
2. ESF-6 representatives should rely upon the information provided from other ESFs, but should also be cognizant of any information gained through aerial damage assessments and the placement of any on-site IMAT or Rapid Needs Assessment teams within the affected counties. If ingress/egress with the affected areas is not possible, and if communications are sporadic/non-

existent, aerial damage assessment may be the only way of identifying areas in need of mass care, emergency assistance, housing, and human services supplemental assistance.

3. The RRCC and/or JFO should be staffed in accordance with the ESF-6 Standard Operating Procedure (SOP). The ESF-6 lead, FEMA Recovery Division/IA and its volunteer support agency, ARC, and ESF-6 support agencies will send representatives to support RRCC activities.
4. Upon arrival at the RRCC, all ESF-6 agency representatives will receive a briefing by Region VII personnel regarding the known status of the affected counties including damage sustained, injuries, deaths, unmet critical needs, etc. In all likelihood, the amount of intelligence available at this time will be extremely limited.
5. The provision of non-medical mass care and emergency assistance (emergency shelter, feeding, and first aid) will be a priority to save lives and lessen human suffering.

Congregate Care Sheltering

U.S. Department of Health and Human Services

1. Provide support within the disaster-affected area through the deployment of pre-rostered human services assessment teams.
2. Provide interdepartmental policy and planning, program management, and oversight of HHS staff
3. HHS regional staff will be responsible for the coordination of federal human services support.
4. Provide subject-matter expertise, consultation, and technical assistance to ESF-6 partners on disaster human services issues (e.g., working with access and functional needs populations, assessing child care needs, accessing HHS programs that address human services needs in an emergency, etc.).
5. Coordinate with the ESF-6 lead agencies to ensure that the appropriate benefits are delivered to the impacted population.
6. Inform people receiving services under HHS direction about the availability of the National Emergency Family Registry Locator System (NEFRLS) and National Emergency Child Locator Center (NECLC); facilitate their access to the system to assist displaced adults and medically evacuated patients in reunification with their families.
7. Provide HHS medical workers to augment health services personnel as appropriate.
8. Provide medical care and mental health services for impacted populations either in or outside the shelter locations in accordance with appropriate guidelines utilized by local health agencies.
9. Provide technical assistance for shelter operations related to food, vectors, water supply, and waste disposal.
10. Assist in provision of medical supplies and services including durable medical equipment.
11. Coordinate emergency medical care in shelters at the request of affected states in accordance with appropriate guidelines utilized by local health agencies.

U.S. Army Corps of Engineers

1. Provide assistance by inspecting shelter sites to ensure suitability and accessibility of facilities to safely shelter victims.
2. Provide assistance in constructing temporary shelter facilities, including accessible shelters, in the affected area, as required.

3. Provide temporary housing support, such as temporary structures and expedited repair of damaged homes (to include temporary roofing or other repairs that facilitate reoccupation of minimally damaged structures), as necessary.

U.S. Department of the Interior

1. Provide appropriate resources (e.g., cots, blankets, sleeping bags, personnel) for shelters if available.
2. Resources will be assigned commensurate with each unit's level of training and the adequacy and availability of equipment. ESF-4 or the USDA/Forest Service Disaster and Emergency Operations Branch are the contacts for this support.

U.S. Department of Agriculture, Forest Service

1. Provide appropriate resources (e.g., cots, blankets, sleeping bags, personnel) for shelters, if available.
2. Resources will be assigned commensurate with each unit's level of training and the adequacy and availability of equipment. ESF-4 – Firefighting or the USDA/Forest Service Disaster and Emergency Operations Branch is the contact for this support.

American Red Cross

1. Work on a case-by-case basis with DHS/FEMA on transient accommodations.
2. Provide coordination and information support at the RRCC for efforts to meet the mass care needs of victims of disaster.
3. Manage ongoing daily ARC operations working with the state lead agencies for mass care and NGO partners.

Household Pets

U.S. Department of Agriculture, Animal and Plant Health Inspection Service

Ensure an integrated response and provide technical support and subject-matter expertise to provide for the safety and well-being of household pets.

USDA, Food and Nutrition Service

Provide other food and nutritional assistance in accordance with ESF-11.

U.S. Department of Health and Human Services, Veterinary Medical Services

1. Identify and provide qualified veterinary medical personnel for events requiring veterinary medical services or public health support for household pets and service animals.
2. Coordinate and provide emergency and disaster-related veterinary medical care services to impacted animal populations (including household pets and service animals) in or outside of shelter locations until local infrastructures are reestablished.
3. Provide veterinary public health, zoonotic disease control, environmental health, and related services.

Bulk Distribution

Federal Emergency Management Agency

Fully deploy logistical concept of operations

U.S. Department of Defense, U.S. Army Corps of Engineers

Fulfill mass care requirements for ice and water in coordination with ESF-6.

Feeding

U.S. Department of Agriculture, Food and Nutrition Service

1. Locate and secure supplies of food, including federally owned surplus foods, to supplement those in the disaster area.
2. Provide statistics on the quantities and locations of food furnished by the Food and Nutrition Service.
3. Provide other food and nutritional assistance in accordance with ESF-11.
4. Provide emergency food stamps.

Evacuation

Federal Emergency Management Agency

1. Maintains contracts capable of providing bus and aviation evacuation support. If necessary, FEMA has the capability to contract additional resources. If commercial transportation is not available, additional transportation assistance may be requested from the DOD and other federal departments. ESF #8 supports state, local, and tribal governments for patient movement in a mass evacuation. When FEMA requests DOD support, DOD may provide air transportation and ground support capabilities for air transportation of patients on an as-available basis when approved by the Secretary of Defense.
2. Responsible for ensuring adequate resources are available for evacuation efforts, including but not limited to ensuring fuel and basic vehicle service are available along evacuation routes and vehicle location devices are available for federal evacuation vehicles.
3. In conjunction with ESF #1, responsible for coordinating evacuation routes with state, tribal, and local agencies and, in particular, determining the status of transportation infrastructure to be used for evacuation.
4. Ensures that vehicles and vehicle operators are available and are dispatched to pick up points.
5. Ensures that transportation assets, including accessible transportation, are available at reception sites to transport evacuees to congregate care shelters.
6. Works with state, tribal, and local authorities to support contra flow planning and execution, when feasible.

3.1.2.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

The purpose of this phase is to develop sustainable mass care operations through defined operational periods, scaled as closely as possible to the needs of the event.

End State of Phase

The end state of this phase is sustainable operational periods characterized by defined resource needs and a steady state of mass care operations.

Local Mission-essential Tasks

Congregate Care Sheltering

1. Local jurisdictions' Mass Care Coordinators will transition into a long-term sheltering paradigm; they will work with the local sheltering agencies to ensure intermediate and long-term sheltering needs are met. The EMD will work with state and federal agencies and NGOs to reunite all families separated by the disaster.
2. The LOMACC will ensure that all shelter residents have access to all levels of client services, including FEMA, ARC, MDHSS, mental health, etc.
3. The EMD will continue to make timely requests to the SEOC, ESF-7 Logistics as needed.
4. Determine if assessment of individual shelter resident housing needs have been initiated.
5. The LOMACC will work with state and federal agencies, NGOs and local COADs/LTRCs to transition residents to more permanent housing solutions as opportunities arise to do so.
6. The LOMACC will work with LEOCs and with state and federal human services branch officials to determine long-term sheltering needs.
7. MDHSS and MDSS local staff will assist in assessing and coordinating housing needs of persons evacuated from medical care facilities. Medical care facilities include hospitals, nursing homes, hospices, medical group homes, and other care settings where individuals receive medical care from health care professionals. The LOMACC or designees will be part of the coordination/assessment team.

Household Pets

Pet sheltering will continue and should be coordinated with the Missouri Humane Society and the USDA, as needed.

Bulk Distribution

1. Bulk Distribution will continue as long as required.
2. PODs, minimum one per county, may phase out or transform into service centers or multi-agency warehouses. State support should be requested as need arises. This effort should be coordinated with ESF-7 Logistics operations. Through this process, integration of resource and donations management should be obtained.

Feeding

1. As populations are evacuated out of the impacted area, the need for feeding operations may decrease, and eventually continued operations may not be needed. This assessment should be made by the local feeding task force in conjunction with the EMD and local elected and appointed officials.
2. Provide assistance to the local Feeding Task Force as long as needed (ARC, Salvation Army, and Southern Baptist).

Evacuation

1. All risk and host county EOCs will notify the EMT of the estimated time of completion of the regional evacuation and when the evacuation has been completed. Upon receipt of such information, the EMT will notify all LEOCs within the impacted jurisdictions accordingly.
2. If evacuation is terminated, impacted counties/cities should:

- a. Use local police to block further access to evacuation routes or return routes to normal operation.
 - b. Open last resort refuge buildings and encourage people to evacuate to those facilities, if not already evacuated.
 - c. Report shelter status to EMT on regular basis.
3. Host area counties should:
 - a. Accept evacuees as long as they continue to arrive.
 - b. Take precautions as necessary to prepare shelter and opening facilities for inclement weather, including aftershocks.
 - c. Continue to report shelter status to EMT.
 - d. Consider neighboring cities/counties as shelter capacity is exceeded.

State Mission-essential Tasks

Congregate Care Sheltering

Missouri Department of Social Services

1. Maintain activity until directed to recall personnel and resources.
2. Begin deactivating personnel and resources, including consolidating shelters as needed.
3. Identify housing requirements and preferred options to meet requirements of sheltering population.
4. As congregate care facilities capacity to provide care is exceeded, it may be necessary to consider alternative strategies, or non-conventional resources for service provision.

State Emergency Management Agency

1. The state and federal human services branch directors should coordinate with the Long-Term Recovery Task Force and develop a Transitional Housing Plan.
2. Longer term operations should include identification of temporary housing sites, deployment of housing units, contracting of long-term leases of temporary housing or contracting of long-term hotel occupation.

Household Pets

Missouri Humane Society

1. The State's VMAT will continue to be deployed as long as pet sheltering generates sufficient need.
2. Transportation of pets may occur to locations outside the State for longer-term sheltering and adoption.

Bulk Distribution

Missouri Department of Social Services

1. Continue to assist and provide resources to organizations and agencies providing bulk distribution.
2. Continue to assist local jurisdictions in transportation of goods and delivery to populations in need.

3. Continue to coordinate with resource providers, including the private sector through MOP3.
4. Prioritize resources for sustainable response actions with assistance of volunteer agencies.
5. Continually assess the situation and understand the capabilities of state assets.

Feeding

Missouri Department of Social Services

Continue to support statewide feeding operations through the State Feeding Task Force until need has been sufficiently satisfied.

Evacuation

Missouri Department of Public Safety

1. The EMT will continue to monitor the situation; evacuation will be assessed for effectiveness; report status of movements and problems affecting expedited traffic flow.
2. Out of state evacuation will be considered as host cities' and counties' capabilities and capacities are met.
3. Alert impacted counties and state traffic control posts of the time that evacuation routes will be closed or if continued operation will be essential.
4. In conjunction with ESF-15 and the EMT, alert media so that people still in the impacted area can seek last-resort refuge, an EAS or CAS. Project needed capacity for continued operations.
5. Prepare for continued damage assessment and post-disaster recovery activities

Federal Mission-essential Tasks

Congregate Care Sheltering

American Red Cross

1. Continue to support shelter operations.
2. Assess impact of and determine courses of action to ensure blood sustainability and delivery with MDHSS and the American Association of Blood Banks.

U.S. Department of Housing and Urban Development

1. Provide access to and information on available habitable housing units, including housing units accessible to individuals with disabilities, owned, or in HUD possession, within or adjacent to the incident area for use as temporary housing.
2. Ensure disaster victims receiving Section-8 Rental Assistance vouchers prior to the disaster are reintegrated into that program.
3. Provide access to housing counseling services.

U.S. Department of Justice

Provide security at mass care facilities when necessary to augment the capacity of local, tribal, and state authorities.

U.S. Department of Labor

1. Provide technical assistance related to worker safety and health issues through the Occupational Safety and Health Administration (OSHA).
2. Execute requirements as defined under the Disaster Unemployment Assistance (DUA) program.

U.S. Department of Veterans Affairs

1. Provide medical workers to augment health services personnel to support mass care operations.
2. Provide available facilities suitable for mass shelter.
3. Provide emergency healthcare services to veteran beneficiaries in Veterans Administration (VA) medical facilities, to active duty military personnel, and, as resources permit, to civilians in communities affected by national security emergencies during incident operations.

Household Pets

USDA, Animal and Plant Health Inspection Service

Continue integrated response and provide technical support and subject-matter expertise to provide for the safety and well-being of household pets.

USDA, Food and Nutrition Service

Continue the provision of other food and nutritional assistance in accordance with ESF-11.

U.S. Department of Health and Human Services, Veterinary Medical Services

1. Continue the identification and provision of qualified veterinary medical personnel for events requiring veterinary medical services or public health support for household pets and service animals.
2. Coordinate and provide emergency and disaster-related veterinary medical care services to impacted animal populations (including household pets and service animals) in or outside of shelter locations until local infrastructures are reestablished.
3. Provide veterinary public health, zoonotic disease control, environmental health, and related services.

Feeding

U.S. Department of Veterans Affairs

1. Provide for food preparation and stockpiling in its facilities during the incident.
2. Contribute to ESFs including providing remedial infrastructure restoration, mass care services, resource (logistic) support, and health and medical services.

Evacuation

U.S. Department of Transportation

1. Provide highway information and other resources related to supporting transportation activities.
2. Provide information on status of and plans for transportation infrastructure and operations.

Federal Emergency Management Agency

1. If required, general agencies, working with state, tribal, and local governments, will ensure the governor(s) of state(s) receiving evacuees from the State of Missouri agree to accept these individuals prior to evacuation
2. Coordinate with: state and local governments and ESF #12 – Energy to ensure that adequate supplies of fuels (gasoline and diesel) are pre-positioned along evacuation routes.
3. FEMA Voluntary Agency Liaisons (VAL) will coordinate with voluntary agencies affiliated with NVOAD, other NGOs, and private-sector entities for federally supported evacuation in affected and receiving states.

4. Coordinate with ESF #13. Activities may involve assisting state, tribal, and local governments with security assessments of pre-identified transportation facilities, site security at designated evacuation locations, traffic control, and/or transportation security duties. In addition, ESF #13 coordinates with state, tribal, and local authorities to ensure security and traffic/crowd control are provided at staging areas and pickup points and onboard evacuation vehicles if requested by the state, tribal, or local government.
5. Work with DOT/Federal Aviation Administration (FAA), which manages the National Airspace System before, during, and after a major incident, to plan and carry out any evacuations using aircraft.
6. FEMA, DOD, and other key federal, state, and local authorities involved with air evacuations will maintain constant coordination with DOT/FAA to enable air operations through air navigation services measures, including air traffic control, flow management, and airspace measures.

4.0 Oversight, Coordination and Communications

4.1 Cooperating Agencies (Primary)

4.1.1 Local

- Emergency Management Director
- Local Mass Care Coordinator

4.1.2 State

Overall Mass Care Lead:

- Department of Social Services (MDSS)

Shelter Lead:

- American Red Cross
- Department of Social Services

Feeding Leads:

- American Red Cross
- The Salvation Army
- Southern Baptist

Bulk Distribution:

- The Salvation Army
- Convoy of Hope
- AmeriCorps

Pet Sheltering:

- Humane Society of Missouri

Mass Care Emergency Response Team:

- SEMA

Evacuation:

- The Governor's Office
- Evacuation Management Team

4.1.3 Federal

- Department of Homeland Security/Federal Emergency Management Agency

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Community Organizations Active in Disaster
- American Red Cross
- The Salvation Army

4.2.2 State

- American Red Cross
- The Salvation Army
- Convoy of Hope
- Missouri Baptist Convention
- Missouri Department of Corrections
- Department of Health and Senior Services
- Missouri Department of Mental Health
- Department of Elementary and Secondary Education
- Missouri Department of Higher Education
- Department of Public Safety
- Office of Administration
- Humane Society of Missouri
- Department of Natural Resources
- Missouri Community Service Commission
- AmeriCorps St. Louis Safety Corps
- Amateur Radio Emergency Services
- Missouri National Guard
- Adventist Community Services
- United Way 211
- Church of the Brethren
- Missouri Hospital Association
- Missouri Public Service Commission
- Association of Rural Electric Cooperative
- Missouri Public Utilities Association

4.2.3 Federal

- Department of Agriculture
- Department of Defense

- Department of Health and Human Services
- Department of Homeland Security
- Department of Housing and Urban Development
- Department of the Interior
- Department of Justice
- Department of Labor
- Department of Transportation
- Department of the Treasury
- Department of Veterans Affairs
- General Services Administration
- Small Business Administration
- Social Security Administration
- U.S. Postal Service
- American Red Cross
- Corporation for National and Community Service
- National Voluntary Organizations Active in Disaster
- Other ESF-6 will work with all support agencies.

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The Emergency Management Assistance Compact (EMAC) offers state-to-state assistance during a governor-declared state of emergency (receiving state). During a NMSZ incident, it is assumed that EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

1. The Governor of Missouri will declare a disaster.
2. SEMA will open an EMAC event in the EMAC Operations System.
3. Missouri will request assets based on mission assignment.
4. The assisting state will detail the available assets and estimated costs back to SEMA.
5. SEMA will approve the resource and cost.
6. The resource from the assisting state will mobilize and deploy.

For resources not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

Table C6-15 details potential resources which may be requested through the EMAC system from non-impacted state ESFs to Missouri by pre-incident agreement, as well as federal resources available through the ARF to request federal resources through a FEMA Mission Assignment. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

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Table C6-15 Pre-Script EMAC Request

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	Donations Management Team	
	Management Team for 500-person congregate care facility	
	2000-Person Shelter Management Mission-ready Package	
	State Shelter Managers	
	Document Unit Team to support Finance and Administration	

5.2 Pre-scripted Requests for Federal Assistance

Table C6-16 details potential resources which may be requested through the Federal Government via FEMA Mission Assignments. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C6-16 Pre-Script Action Request Form

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Administrator	MDHSS		National Disaster Medical System		
	Administrator	MDSS/ SEMA		Personnel to support State with Federal Direction and Coordination (IMAT)		
	Administrator	SEMA		Teams to perform Preliminary Damage Assessment and Rapid Needs Assessment		
	Administrator	MDSS/ SEMA		Military Team to prepare sites for Temporary Housing at various locations in Missouri. Includes site clearance, grading, rocking, permits and waivers, housing personnel to support the State and NRCC for IMAT, PDAs and RNAs.		
	Administrator			ESF-6 Temporary Housing Contract Personnel to support IA TAC task orders and administration		
	Administrator			Temporary roofing team to support State with expedited contracting for supplies, equipment, materials, and logistics. In addition, provide subject-matter experts (SME) to execute awards and monitor contractors.		
	Administrator			Planning and response teams to support State and FEMA with contracts to haul, install, and recover temporary housing structures such as MHUs. Temporary housing requirements include real estate support; right of entry, leasing, site restoration, historic preservation, permits, and environmental waivers.		
	Administrator			Temporary housing teams to support site development, construction, utilities, etc.		
	Administrator			Team to provide communication cache support and shelter items (cots, blankets, sleeping bags)		

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ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Administrator			SME's to support State and FEMA with shelter, feeding, donations/volunteer management, warehousing, debris removal, tarping, chain saw work, call centers, volunteer base camps, needs assessments, and long-term recovery committee representation.		
	Administrator	MDSS/ SEMA		ESF-6 Decision Makers to support the State in the SEOC/JFO		
	Administrator	MDSS/ SEMA		Housing SMEs to support the State-Led Housing Task Force		
	Administrator	MDSS/ SEMA		Agricultural SMEs in the field and at the SEOC/JFO. Requirements include planning, operations, and evacuations involving lab animals, captive wildlife, agricultural animals, and household pets.		
	Administrator	MDSS/ SEMA		Rural development operations to support fixed operations locations and SME representation for the state-led housing task force		
	Administrator	MDSS/ SEMA		Veteran Affairs SMEs to serve as representatives on the state-led housing task force; housing plans; and the housing portal database.		
	Administrator	MDSS/ SEMA		Request Forest Service team to provide representation in the Mass Care Unit with expertise in planning		
	Administrator	MDSS/ SEMA		Durable Medical Equipment Kits for Children/ Adults		
	Administrator	MDSS/ SEMA		Consumable Medical Supply Kits to support ESF-6		

6.0 Operational Tools

This Section provides resource calculations and other tools to support integrated earthquake planning and response.

6.1 Resource Calculations for Mission-essential Tasks

The information below represents the raw data for the ESF- NMSZ planning:

ESF 6 NMSZ Requirements	Number Per	Unit of Measure	Total (5 Days)	Label	Source
Total Population in Impact area			2,288,445	Total persons in impact area	Census (2000)
"At-Risk" Population			842,002	"At Risk" Persons	MAE II
Shelter Seeking Population			237,991	Shelter Seeking Population	MAE II
Pets	0.54285	units per person	129,193	Shelter Seeking Pets	MAE II
Impacted Population in Poverty	0.23375	units per person	534,924	impoverished persons	MAE II
Impacted Population Vulnerable Age	0.23375	units per person	534,924	vulnerable age persons	MAE II
Impacted Population Disabled	0.23375	units per person	534,924	disabled persons	MAE II
General Mass Care and Sheltering	Number Per	Unit of Measure	Total (5 Days)	Label	Source
Total sheltering space	480	Sq. Ft. per person	87,533,090	Sq. Ft. of Shelter Space	Sphere
Sleeping space	60	Sq. Ft. per person	10,941,636	Sq. Ft. of Sleeping Space	ARC, Sphere
Total number of 500 person shelters (total)	240000	Total Sq. Ft per shelter	365	Total # of 500 person shelters	
Toilets	0.025	units per person	4,559	Toilets	Sphere
Sinks	0.0125	units per person	2,280	Sinks	Sphere
Garbage	0.02	units per person	3,647	30 Gallon Garbage Containers	ARC, Sphere
Ice	8	Lbs. per person	5,198,277	Lbs. of Ice	USACE
Water (drinking, hygiene, cooking)	19	liters per person	12,345,907	Liters of Water	Sphere
Food (MRE)	2	units per person	1,299,569	MREs	USACE
Staffing, General (500 person shelters)	0.094	units per person	17,142	General Shelter Staff	ARC
Staffing, Supervisory (500 person shelters)	0.03	units per person	5,471	Supervisor (trained) Shelter Staff	ARC

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Cots	1	units per person	182,361	Cots	ARC
Blankets	1	units per person	182,361	Blankets	ARC
Functional Needs Sheltering	Number Per	Unit of Measure	Total (5 Days)	Label	Source
Number of Shelter Seekers with Disability	0.23375	units per person	55,630	Functional Needs Requiring Shelter	MAE II
Medical Staff requirements	0.07145	units per person	3,975	Medical Staff	MAE II
Toilets	0.025	units per person	1,391	FN Shelter Toilets	Sphere
Sinks	0.0125	units per person	695	FN Sinks	Sphere
Garbage	0.02	units per person	1,113	30 Gallon Garbage Containers	ARC, Sphere
Ice	8	Lbs. per person	1,585,771	Lbs. of Ice	USACE
Water	19	liters per person	3,766,207	Liters of Water	Sphere
Cots	1	units per person	55,630	Cots	ARC
Blankets	1	units per person	55,630	Blankets	ARC
Food	2	units per person	396,443	MREs	USACE
Pets	Number Per	Unit of Measure	Total (5 Days)	Label	Source
Dogs Requiring Shelter	0.25500124	Dogs per Person	60,688	Dog requiring shelter	MAE II
Cats Requiring Shelter	0.28741843	Cats per Person	68,403	Cats requiring shelter	MAE II
Dog Food	0.75	Lbs. per dog	162,182	Lbs. of Dog Food	HS of MO
Cat Food	0.2	Lbs. per cat	48,747	Lbs. of Cat Food	HS of MO
Water	3	Liters per pet	1,380,540	Liters of Pet Drinking Water	HS of MO
Cages	1	per pet	129,091	Pet Cages	MAE II
Square ft of Cat Shelter	15	per cat	910,320	Sq. Ft. of Cat Shelter	HS of MO
Square ft of Dog Shelter	50	per dog	3,034,400	Sq. Ft. of Dog Shelter	HS of MO
Total Square ft of Animal Shelter			4,461,084	Total Sq. Ft. of Animal Shelter Space	HS of MO
Cat Litter	1	Lbs. per pet/ day	330,987	Lbs. of Cat Litter	HS of MO
Disposal	0.004	Dumpster per Pet	516	Total number of dumpsters needed/day	HS of MO
Food/Water Dish	2	per pet	258,387	Food and Water Dishes	HS of MO
Veterinarian	0.004	per pet	1,292	Veterinarians	HS of MO

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Joint Missouri & Region VII Response Operations Plan

Staff, Trained	0.04	per pet	5,168	Trained Animal Shelter Staff	HS of MO
Bulk Distribution and Feeding	Number Per	Unit of Measure	Total (5 Days)	Label	Source
MREs, Ingress	2	Per person/Day	21,126,482	MREs into Impact Area	FEMA
Water, Ingress	3	Liters per person/Day	31,689,723	Liters of water into Impact Area	FEMA
Blankets, Ingress	2	Per person	4,576,890	Blankets into Impact Area	FEMA
Cots, Ingress	1	Per person	2,288,445	Cots into Impact Area	FEMA
Comfort Kits, Ingress	1	Per person	2,288,445	Comfort Kits into Impact Area	FEMA

Raw Data			
Element	MAE Center	MDHSS	Notes
Counties Impacted	23	23	MAE Center Data
Impacted Population (Based on 2009 Census Projection)	2,288,445	2,288,445	MAE Center Data
"At Risk" Population	842,002	842,002	MAE Center Data
Number of Persons Seeking Shelter	237,991	237,991	MAE Center Data
Percent in Poverty			SE Counties
Percent Vulnerable Age	23	23	SE Counties
Percent Disabled	23	23	Average of All Counties
Injuries	13,434	92,719	Region C and E
Level 3 Injuries	10,177	70,240	Require Medical Aid
Level 2 Injuries	2,897	19,995	Require Hospital Care
Level 1 Injuries	360	2,485	Life-Threatening
Fatalities	686	4,735	Region C and E
Total Hospital Facilities	208	164	Source: MDHSS
Total Hospital Beds	27,343	22,031	Source: MDHSS
Hospitals Lost in Regions C and E	7	61	Source: MDHSS
Hospital Beds Lost in Regions C and E	846	10,715	Source: MDHSS
Mission-essential Task: Lead and Coordinate Emergency and Acute Care Operations			
Critical Analysis 1: Hospital Bed Gap Analysis			
Total Beds	27,343	22,031	Source: MDHSS
			Beds, and psych staffed beds
Remaining Beds	26,497	8,536	Source: MDHSS
Open Beds	6,624	2,134	Assumes 75% hospital capacity

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Joint Missouri & Region VII Response Operations Plan

Beds Needed for Level 1 and 2	3,257	22,479	Per MDHSS Data
Shortage of Beds	3,367	-20,345	
Conclusion: Bed space within Missouri is inadequate under the accepted assumptions. Data assume that patients are triaged and evacuated at the earliest opportunity. Level 1 critical care patients may require evacuation to nearest out-of-state hospitals. EMAC and federal resources will be necessary to provide support staff at hospitals throughout the state.			
Critical Analysis 2: Medical Staging/Field Hospital Analysis			
Option 2.1: Treat and Release/Evacuate			
Total Requiring Medical Support (Level 1, 2, and 3)	13,434	92,719	Source: MDHSS
State Capacity for "Field Treatment" (trailers)	8,620	7,020	Source: MDHSS
Staffing Needs to Support Trailers(Two 12-hour shifts)	1,231	1,003	Assumes patient to staff ratio of 14:1
Federal Needs	-4,814	-85,699	Capacity Gap for Treatment
DMAT Capacity (3 days)	750	750	250 patients/day for 3 days
DMATs Needed*	6	114	
Conclusion: *Assumes 250 patients treated/day for 3 days at each DMAT. Also assumes local/state staff is available to support operationalizing MCI/MS trailers. Requires evacuation of patients needing additional long-term medical support post treatment each day. This option limits DMAT requests but puts pressure on evacuation resources to move patients out of the impact zone. Also assumes Level 3 patients are triaged and evacuated immediately.			
Option 2.2: Treat and Hold			
Total Requiring Medical Support (Level 1, 2, and 3)	13,434	92,719	Source: MDHSS
State Capacity	8,620	7,020	Source: MDHSS
Staffing Needs to Support Trailers(2 1/2 hour shifts)	1,231	1,003	Assumes patient to staff ratio of 14:1
Gap/Excess	-4,814	-85,699	Capacity Gap for Treatment
Type 1 DMAT Capacity (3 days)	250	250	patients/day for 3 days for all three state divisions
DMATs Needed*	19	343	
Conclusion: *Assumes 250 patients treated and held for 3 days at each DMAT. Also assumes local, state, and/or EMAC staff is available to support operationalizing MCI/MS trailers. This option requires additional DMATs but reduces impact on evacuation support needed to move patients out of the impact zone at any given time (stagger evacuation needs and provides flexibility). Also assumes Level 3 patients are triaged and evacuated immediately.			
Mission-essential Task: Support Patient Evacuation/Movement			
Critical Analysis 3: Level 1/2 Evacuation Support			
Level 1 Critical Care Evacuation			
Total Requiring Immediate Evacuation	360	2,485	Level 1 Patients per MDHSS
Number per Helicopter	2	1	Dependent on type of helicopter used
Operations/Day/Helicopter	12	10	Maximum
Total Helicopter Operations	15	248	
Pilots/Crew	60	994	1 pilot/1 crew member for 2 shifts

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Appendix C6 – ESF-6, Mass Care

Joint Missouri & Region VII Response Operations Plan

Number of Helicopters Needed - 1 Day Operation	15	248	
Conclusion: Based on the numbers shown above, approximately 248 helicopters are needed to support Level 3 evacuation. It is assumed that injured will be moved to a dozen or more medical collection/triage/treatment sites throughout the impact zone. It is also assumed that Level 1 patients will require immediate evacuation (a 1- to 2-day operation) to sustain life. Complete reliance on rotary wing operations is not sustainable.			
Level 2 Medical Evacuation			
Level 2 Event Population Requiring Evacuation	2,897	19,995	Level 2 (assumes in-zone stabilization) per MAE Center
Impact Zone Hospital Population Requiring Evacuation	635	8,036	Patients in hospital at the time of the incident; assumes 75% hospital capacity.
Total Level 2 Population Requiring Evacuation	3,532	28,031	Level 2 Injured + People already in the hospital
Number per Helicopter	2	2	Dependent on type of helicopter used
Operations/Day/Helicopter	12	10	Maximum
Total Helicopter Operations	147	1,402	One day operation
Number of Helicopters Needed – 2-Day Operation	74	701	
Pilots/Crew	294	2,803	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – 3-Day Operation	49	467	
Pilots/Crew	196	1,869	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – 4-Day Operation	37	350	
Pilots/Crew	147	1,402	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – 5-Day Operation	29	280	
Pilots/Crew	118	1,121	1 pilot/1 crew member for 2 shifts
Conclusion: These calculations assume that Level 3 patients are treated and released and evacuated with shelter populations. Based on the DHSS data, between 280 and 701 helicopters are needed for level 2 evacuations depending on the number of days of operation. Balancing treatment and care of Level 2 patients in the impact zone with evacuation is crucial to managing the overall ESF-8 operation as well as managing available air operations resources. The ability to treat and care for patients in the impact zone may also provide time necessary to operationalize and use ground transportation. Complete reliance on rotary wing operations is not sustainable.			
Evacuation of those with Access and Functional Needs			
Approximate Number of People with Functional Needs	252,448	611,800	23.375% of Regions C and E
Number per Helicopter	10	10	
Operations/Day/Helicopter	12	10	Maximum
Total Helicopter Operations	2,104	6,118	
Number of Helicopters Needed – 2-Day Operation	1,052	3,059	

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Appendix C6 – ESF-6, Mass Care

Joint Missouri & Region VII Response Operations Plan

Pilots/Crew	4,207	12,236	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – 3-Day Operation	701	2,039	
Pilots/Crew	2,805	8,157	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – 4-Day Operation	526	1,530	
Pilots/Crew	2,104	6,118	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – 5-Day Operation	421	1,224	
Pilots/Crew	1,683	4,894	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – 10-Day Operation	210	612	
Pilots/Crew	841	2,447	1 pilot/1 crew member for 2 shifts
Conclusion: Significant rotary operations are required to support evacuation of those with access and functional needs. Evacuation must be augmented by ground transportation once roads are opened or modified to support use.			
Mission-essential Task: Coordinate Medical Support for those with Access and Functional Needs			
Critical Analysis 4: Capacity Needed for Medical Support of those with Access and Functional Needs			
Approximate Number of People with Disabilities	55,630	611,800	23.375% of "At Risk" and Shelter Seeking Population
Staffing for Mass Care of those with Functional Needs	3,974	87,400	Assumes patient to staff ratio of 14:1
Shelters Needed: 100 per Shelter	556	6,118	
Staffing per Shelter	14	14	
Shelters Needed: 200 per Shelter	278	3,059	
Staffing per Shelter	29	29	
Shelters Needed: 250 per Shelter	223	2,447	
Staffing per Shelter	36	36	
Shelters Needed: 500 per Shelter	111	1,224	
Staffing per Shelter	71	71	
Conclusion: Significant medical support needs exist for those with access and functional needs. The approximate number of people with access and functional needs is based on the percentage of disabled in Regions C and E. Persons with access, functional, and non-acute medical needs will be sheltered at Congregate Care Shelters (with the general population) with medication support via the Strategic National Stockpile (SNS) Managed Inventory and other resources as available.			
Mission-essential Task: Coordinate Medical Support for Chronic Illnesses at Congregate Care Shelters			
Critical Analysis 5: Capacity Needed for Medical Support of Chronic Illnesses at Shelters			
Approximate Number of People w/Medical Needs	140,891	140,891	Breakdown of conditions provided below.
Cancers	7,854	7,854	Medication needs can be assessed using these numbers. SNS Managed

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Appendix C6 – ESF-6, Mass Care

Joint Missouri & Region VII Response Operations Plan

Diabetes	9,520	9,520	Inventory can be requested to support medication needs to support chronic treatment needs at General Population Shelters.
Heart Disease	19,515	19,515	
Hypertension	33,795	33,795	
Stroke	2,380	2,380	
Mental Disorders	24,751	24,751	
Pulmonary Conditions	43,076	43,076	
Staffing for Care of those w/Medical Needs	20,127	20,127	
Shelters Needed: 500 per Shelter	282	282	
Conclusion: It is assumed that a majority of these individuals can be supported at General Population Shelters if medications are provided via the SNS Managed Inventory or other sources. People requiring additional care can be placed in an Acute Medical Care Shelter or hospital.			

6.2 Evacuation Requirements Calculations

For evacuation of the Mid-America Earthquake (MAE) Center impacted counties, the following methodology was utilized to develop the evacuation projections for this scenario:

- Determine the area to be evacuated: The evacuation area is been defined as the State of Missouri MAE Center impacted counties (21 counties and the City of St. Louis). If an evacuation extends beyond the 22 jurisdictions, this plan will be expanded by emergency officials to accommodate the additional area and population.
- Determine the population affected: The total population of the evacuation area was estimated (see below Table C6-17 and Table C6-18) using data from the U.S. Census (2000) and MAE Center (Phase II). Some discrepancies exist in data analysis.

Table C6-17 Impacted Population

Populations (72 hours post-incident)	Number
Total Impacted (22 counties)	2,288,445
Total “At Risk”	842,002
Total Shelter Seeking	237,991

Table C6-18 Anticipated Evacuees

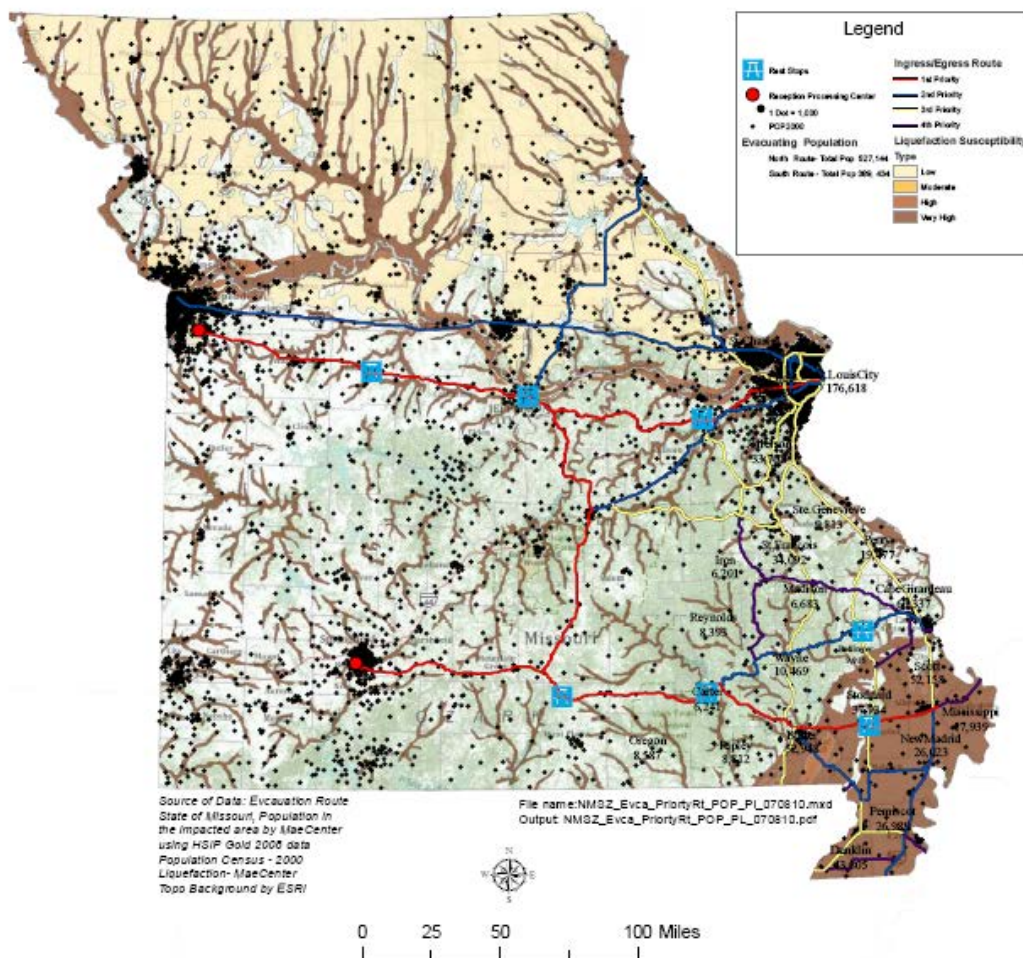
Route	Number
Saint Louis Area (Northern Route)	527,144
Southeastern Missouri (Southern Route)	389,434
Other (Non-specified)	197,117
Total Evacuees	1,113,695

- Determine primary evacuation routes: The State of Missouri designated two priority routes leaving the impacted areas. These routes were chosen because of the lack of bridge or other wide-span structure which could be damaged by the incident. The primary evacuation routes are detailed in Table C6-19 and Figure C6-7.

Table C6-19 Evacuation Routes

Route	Road Name	Average # Lanes (Outbound)	Average # Lanes (Inbound)
Northern Route	Highway 50	1	1
Southern Route	Highway 60	1	1

Figure C6-7 Missouri Evacuation Map with Population Density



- To determine the capacity of primary evacuation routes: The capacity (in cars per lane, per hour) was calculated using the Highway Capacity Manual (HCM), which establishes levels of service ranging from Level A (highest) to Level F (lowest), based on a set of variables reflecting traffic speed, density and flow rate.
 - This document utilizes Level E as the basis of planning because it represents a conservative but reasonable rate of traffic flow.
 - According to the HCM, Level E traffic is characterized as: "...volatile, because there are virtually no gaps in the traffic stream. Vehicles are closely spaced with little room to maneuver within the traffic stream at speeds that still exceed 49 (mph). Any disruption of the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown with extensive queuing."
 - By using Level E, the plan assumes that all primary evacuation routes will be severely taxed.
 - To simulate Level E, the assumed rate of speed for cars was set at 45 mph regardless of the posted speed limit. Also, because the number of lanes on the evacuation routes varies at different points, the plan uses the most restrictive point along each route.

- Determine the time necessary to conduct an evacuation: Evacuation time was calculated using the following formula: $(V/L) / (LOS E) = T$. Table C6-20 defines the characters in the formula.

Table C6-20 Formula Break-Down

Character	Equivalent To
V	Number of Vehicles
L	Number of Lanes
LOS E	Level of Service (E)
T	Required Evacuation Time

- Calculation: Table C6-21 indicates the evacuation calculation.

Table C6-21 Evacuation Calculation

Item	Number	Detail
Vehicles	556,848	One vehicle for every two evacuees
Lanes of Traffic	2	One outbound lane on each route (two routes)
Vehicles Per Lane	278,424	Total Vehicles Divided by Number of Lanes
LOS E	2,280	Possible Cars Per Lane Per Hour at Level of Service 'E'
Evacuation Time (in hours)	122.12	Vehicles Per Lane Divided by Level of Service 'E'

- Several very important qualifiers must be considered before relying on this figure:
 - It does not include the time needed to issue public warnings, and for the public to receive, understand, and comply with the evacuation order.
 - It does not include the time needed to mobilize buses to assist people who lack their own transportation.
 - It does not include secondary routes, though these routes may be utilized.
 - This is assuming equal distribution of evacuees over both routes
 - Detailed route specific information is as follows:
 - Northern Route: 263,572 vehicles (115.60 hours)
 - Southern Route: 194,717 vehicles (85.40 hours)
 - Unspecified Route: 98,559 vehicles (43.22 hours)
 - This model assumes that all evacuees are utilizing personal vehicles with only two passengers.
 - This does not account for transportation-assisted evacuees relocating via bus, rail, air, or other method.
 - Implementation of contra-flow (all lanes directed outbound) may significantly alter these projections. This is not anticipated.
 - The maximum rate of vehicles per lane per hour is based on LOS E.
 - It does not include traffic disruption due to construction.
 - It assumes continuous travel is possible and no shortage of critical commodities such as fuel.

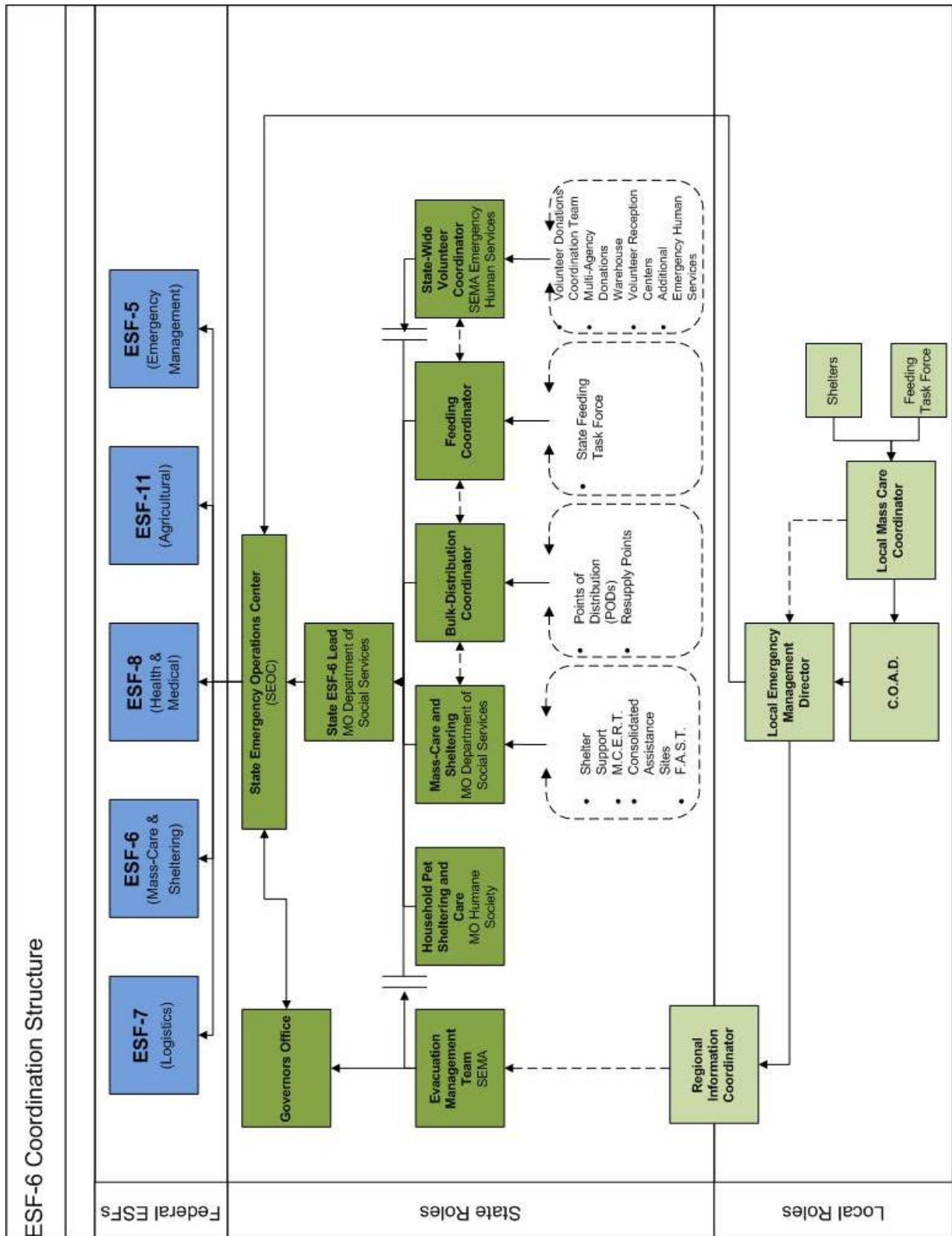
6.3 Crosswalk State/Federal Functions

Table C6-22 Functional Crosswalk

Mission-essential Task	State ESF	Federal ESF(s)
Congregate Care Sheltering	ESF-6 (P) ESF-8 (S)	ESF-6
Household Pet Operations	ESF-6 (P) ESF-11(S) ESF-17 (S)	ESF-11
Bulk Distribution	ESF-6 (P) ESF-7 (S)	ESF-7
Feeding Operations	ESF-6(P) ESF-8 (S) ESF-11 (S)	ESF-6/ ESF-11
Evacuation	ESF-6 (P) ESF-1 (S) ESF-5 (S) ESF-7 (S) ESF-13 (S) ESF-16 (S)	ESF-5

6.4 Coordinated Structure

Figure C6-8 Coordination Structure



6.5 Mass Care Emergency Response Team and Functional Assessment Service Team

All sheltering operations should be conducted in a manner accommodating those with functional and/or access needs, in addition to the general population. In order to accomplish this task, a Functional Assessment Service Team (FAST) will be established to meet the needs of children and adults with and without disabilities who require FNSS. A Mass Care Emergency Response Team (MCERT) will also contribute to the initial assessment and delivery of mass-care. These groups will forward deploy into the affected areas within 24 hours post-incident.

These teams will be made up of state and volunteer agency SMEs who will be available to rapidly deploy after the disaster. Members of both the FAST and MCERT are listed in Table C6-23, however not all of these agencies serve on both teams and participation will depend on resource availability.

Table C6-23 FAST/MCERT Team Members

FAST/MCERT Agencies
Missouri Department of Social Services
Missouri Department of Health and Senior Services
Missouri State Highway Patrol
Missouri National Guard
State Emergency Management Agency
Missouri Department of Mental Health
NGO: The Salvation Army
NGO: The American Red Cross
NGO: Southern Baptists
NGO: AmeriCorps
NGO: Convoy of Hope
DHS: Federal Emergency Management Agency
Local Jurisdictions/ Agencies

SEMA and MONG will provide the MCERT and FAST with the resources necessary to complete their mission including: transportation into and throughout the affected area, communication resources (satellite phones, cb radios, etc.), and food and water supplies (bottled water). Team members will provide their own clothing, sleeping bags, and personal items, etc.

Functional Assessment Service Team

The purpose of the FAST will be to:

- Provide staff to conduct a functional assessment of People with Access and Functional Needs (PAFN) as they arrive at shelters.
- Assessments will evaluate the essential functional needs that can be supported within the congregate care shelter. Shelter seekers unable to be supported within the congregate care shelter will be relocated to a medical shelter or transported to a more appropriate medical facility.
- FAST may remain in the shelters to assist in the overview of Personal Assistances in the continuing functional needs support.

The FAST may be deployed as shelters are opened and remain there until no longer needed. They can also transfer to another shelter as needed or request to deploy to shelters as jurisdictions become aware of their existence during major events.

FAST consists of corps of trained government employees and CBO/NGO personnel ready to respond and deploy to disaster areas to work in shelters.

FAST members have in-depth knowledge of the populations they serve, their needs, services, and resources including housing, benefit programs, and disaster aid programs. FAST will work side by side with shelter personnel and other emergency response workers to assist in meeting essential functional needs so people can maintain their independence during disasters and emergencies.

FAST free other emergency resources to focus on emergency incidents rather than on mitigating complications. Support for essential functional needs will be provided to individuals who have been assessed and determined to be safely accommodated within a shelter. Such accommodations include, but are not limited to providing the following:

- Ensure that essential prescribed medications are obtained.
- Essential durable medical equipment (DME) and essential consumable medical supplies (CMS) are obtained.
- Assistance to maintain independence (personal assistance with activities of daily living, managing non-acute medical and chronic conditions, etc.).
- Support to individuals with cognitive limitations.
- Interpreters and other communication support to assist individuals who require communication assistance (visual and hearing disabilities and limitations, language/cultural, etc.).
- Assistance to individuals who have conditions that affect mobility.
- Assistance to individuals with chronic but stable respiratory conditions (heart disease, asthma, emphysema, allergies, etc.).
- Assistance to individuals with temporary limitations (post-surgery, accident injuries, pregnancy, etc.).
- Management and coordination of processes to address the requirements to maintain functional/medical support operations.

Mass Care Emergency Response Team

The purpose of the MCERT will be to:

- Conduct assessments of the mass care needs in the affected area(s).
- Work with the local mass care responders to determine specific mass care (human and material) needs for each jurisdiction and sheltering operation.
- Determine the most effective methods for delivering the mass care resources to the affected area (human and material resources).
- Prioritize the mass care needs of jurisdictions; ensure that all affected areas receive the level of mass care assistance needed.

MCERT consists of trained government employees and personnel from community-based organizations and NGOs ready to respond to and deploy to disaster areas to work in shelters.

The MCERT members should have extensive knowledge of the populations they serve, their needs, and available services and resources including housing, benefit programs, and disaster aid programs.

The MCERT will rapidly deploy and work through the impacted area, moving from one location to another, as needed.

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C7
ESF-7 – Resource Support and Logistics Management**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 - Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

Appendix C7 – ESF 7, Resource Support and Logistics Management

Please refer to Annex D. Annex D, as an Emergency Support Function (ESF)-7 planning document, sets forth the provisions to support ESF-7 activities. The Missouri State Emergency Management Agency (SEMA) and Federal Emergency Management Agency (FEMA) have adopted a single concept of logistics to support the ESFs responsible to implement the concept of operations.

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Appendix C8 – ESF-8, Public Health and Medical Joint Missouri & Region VII Response Operations Plan

NEW MADRID SEISMIC ZONE EARTHQUAKE JOINT STATE OF MISSOURI & REGION VII RESPONSE OPERATIONS PLAN

**Annex C, Appendix C8
ESF-8 – Public Health and Medical Services**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

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1.0 Situation

The Emergency Support Function (ESF)-8 Appendix to Annex C of the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for joint local, state, and federal health and medical operations following a catastrophic earthquake in eastern Missouri.

Under the Missouri State Emergency Operations Plan (SEOP), the Missouri Department of Health and Senior Services (MDHSS) has primary responsibility for health and medical operations. The purpose of Missouri ESF-8 is to coordinate mass treatment operations; provide mass care support for those with access, functional, and chronic medical needs; and mass fatality operations. Under the National Response Framework (NRF), the United States Department of Health and Human Services (USDHHS) is designated as the Coordinator and Primary Agency for ESF-8. The Federal Emergency Management Agency (FEMA), USDHHS, and other federal support agencies will employ ESF-8 health and medical support when activated to support the State of Missouri in disaster response including medical and other specialized equipment and supplies and services as required and appropriate.

According to modeling data from the Mid-America Earthquake (MAE) Center, a NMSZ earthquake is expected to directly impact 22 Missouri counties and the City of St. Louis. While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire State including the 47 counties recognized by the State as highly susceptible to negative impacts from a seismic incident. This OPLAN also acknowledges that NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties nor the effects of aftershocks are presented unless noted.

Throughout this document, MAE Center data are referenced in addition to data developed by the MDHSS. MDHSS data considers cascading events, additional potential impact in the St. Louis area, and other county-specific data regarding impacts to hospitals, injuries and fatalities, and general ESF-8 response parameters. MDHSS data are based on impacted populations in Missouri Regions C and E. Table C8-1 below indicates projected injuries.

Table C8-1 Projected Injuries and Levels

Injury Severity	Definition	MAE Center Data	MDHSS Data
Level 1 (red)	Have life-threatening injuries	360	2,485
Level 2 (yellow)	Require Hospital Care	2,897	19,995
Level 3 (green)	Require Medical Aid	10,177	70,240
Total Number of People with Injuries		13,434	92,719

According to the MAE Center, seven hospitals¹ with a total of 846 hospital beds within the impact zone are assumed to be lost during an earthquake. MDHSS data indicates that 61 hospital facilities may be lost due to cascading events, with 13,495 beds lost.

In addition, the MAE Center estimates that about 55,640 individuals with access and functional needs and approximately 140,891 individuals requiring medical attention for chronic illnesses, as described in Table C8-2 below, will require medical accommodations at congregate care shelters or medical shelters. Based on medical triage, individuals may be housed at a medical shelter while others will be housed in congregate care shelters operated by ESF-6 with medical support via ESF-8.

¹ The term “hospitals” does not include urgent care centers or long-term care facilities.

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Appendix C8 – ESF-8, Public Health and Medical Joint Missouri & Region VII Response Operations Plan

Table C8-2 Access, Functional, and Medical Needs Estimates

Medical Condition	MAE Center Data	MDHSS Data ²
Access and Functional Needs	55,640	611,800
Medical Needs	140,891	246,235
Cancers	7,854	1,399
Diabetes	9,520	11,121
Heart Disease	19,515	81,702
Hypertension	33,795	13,460
Stroke	2,380	5,363
Mental Disorders	24,751	67,245
Pulmonary Conditions	43,076	65,945
Total	196,531	858,035

Throughout the response phase (Phase 2), it is assumed that roads, bridges, and other transportation infrastructure will be heavily affected, which will necessitate major rotary wing operations for both ingress and egress. Reliance on rotary wing operations will impact ESF-8 operations substantially affecting when and where possible ground transportation will be utilized to support ESF-8 operations.

All large-scale evacuations will be overseen by the Evacuation Management Team (EMT) from the State Emergency Operations Center (SEOC). The EMT is a multidisciplinary team that can support the evacuation efforts, make recommendations to the Unified Command (UC), and coordinate with local jurisdictions. The composition of the EMT is listed in Table C8-3. The EMT will be actively engaged in assessing the impact to jurisdictions and developing a course of action for conducting evacuation operations.

Table C8-3 Evacuation Management Team Composition

Agency Represented	ESF-#	Agency Represented	ESF-#
Missouri Department of Public Safety (MDPS)	ESF-13	Missouri Department of Social Services (MDSS)	ESF-6
Public Information Officer (PIO)	ESF-15	Missouri Department of Health and Senior Services (MDHSS)	ESF-8
State Emergency Management Agency (SEMA)	ESF-5	Missouri State Highway Patrol (MSHP)	ESF-13
Missouri Department of Natural Resources (MDNR)	ESF-10	Missouri National Guard (MONG)	N/A
Missouri Department of Transportation (MoDOT)	ESF-1	Missouri Department of Mental Health (MDMH)	ESF-6
Voluntary Organizations Active in Disaster (VOAD)	ESF-6		

Localized evacuation will be the responsibility of the local jurisdiction. Once a regional evacuation has been implemented by the EMT, the overall concept of operations will be implemented as outlined in the

² Source: Missouri Information for Community Assessment

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Appendix C8 – ESF-8, Public Health and Medical Joint Missouri & Region VII Response Operations Plan

ESF-6 Appendix to this OPLAN. Throughout this process, the EMT and the Local Emergency Management Departments will coordinate efficient deployment of resources and utilization of available evacuee shelter capacity, and effectively address modifications to evacuation routes.

Additional situational analyses are provided in Section 6 as described below. Sections 6.1, 6.2, and 6.3 provide detailed calculations regarding resource needs to support ESF-8 operations:

- Section 6.1 – Resource Calculations for Mission-essential Tasks
 - Raw Demographic and Modeling Data
 - Resource Calculations for Mission-essential Tasks
 - Summary of Mission-essential Task Calculations
- Section 6.2 – NMSZ Incident Patient and Resource Projections
 - Frequently Occurring Injuries
 - Patient Presentation Distribution
 - Supply and Equipment Projections
 - Bed Requirements per 12-hour Interval
 - Projected Mortality Rates for Specific Patient Conditions
- Section 6.3 – Staff Resource Projections
 - Projected Staff Resource Requirements per 12-hour Interval for a NMSZ Incident.

1.1 Purpose

The purpose of this Appendix is to provide ESF-8-specific information for the OPLAN. This ESF-8 Health and Medical Appendix:

- Details limitations, organization, and courses of action to execute roles and responsibilities assigned to ESF-8 during a NMSZ incident
- Identifies gaps and seams
- Enhances unity of effort and links existing plans.

Specifically, this Appendix presents a health and medical plan specifying integrated activities among USDHHS, FEMA Region VII and federal ESF-8 partners, the Missouri State Emergency Management Agency (SEMA) and other critical state agencies, and local responders throughout Missouri. This Appendix provides an overview of supporting activities and how FEMA and its partners will perform ESF-8 public health and medical services missions in support of Missouri under the National Response Framework (NRF) and the 2010 OPLAN. This Appendix is devised to support the following Objectives specified by the Region VII Senior Leadership Steering Committee and the ESF-8 Integrated Working Group:

Objective: Establish emergency medical and public health operations

Objective: Conduct mass fatality operations

This Appendix is organized to:

- Identify components of the public health and medical services delivery structure
- Provide a concept of operations for ESF-8 Public Health and Medical Services
- Outline support responsibilities and potential resource needs for health and medical emergency operations during a major earthquake disaster.

1.2 Considerations

Life saving and life sustaining measures are the primary focus during the response phase of a NMSZ incident. Health and medical considerations are provided below:

- Physical injuries and psychological distress may occur in both highly populated and isolated areas within Missouri:
 - Approximately 13,434 people will require medical treatment according to the MAE Center. Throughout Missouri Regions C and E and as a result of cascading events, this number may be as high as 92,719 according to MDHSS data.
 - Local, state, and federal support of medical triage and treatment will be required under the NMSZ assumptions.
 - Victims, hospital patients, and a portion of those in congregate care shelters who have acute medical needs will require medical evacuation performed largely via rotary wing operations.
 - Approximately 360 Level 1 critical care patients will require expedited evacuation according to the MAE Center. MDHSS estimates that the number of Level 1 patients may be as high as 2,485.
 - Approximately 2,897 Level 2 patients resulting from the earthquake and those previously hospitalized in the impact zone will require evacuation according to the MAE Center. MDHSS estimates that the number Level 2 patients may be as high as 19,995.
 - A surge of existing and new occurrences of psychological concerns will strain medical resources at shelters and hospitals.
 - Individuals with physical injuries and psychological distress will also require pharmaceutical services.
- Approximately 237,991 people in Missouri are expected to be displaced from their homes by Day 3 following a catastrophic NMSZ earthquake.
 - For this catastrophic planning incident, people with chronic diseases controlled by maintenance medications will be housed at Congregate Care Shelters.
 - Such diseases may include diabetes, heart disease, hypertension, stroke, certain mental disorders, pulmonary conditions, and other controlled chronic illnesses.
 - Medical support and provision of medications will be necessary at Congregate Care Shelters. Some medications will be self administered while others may require medical staff support to administer medications.
 - According to MAE Center data, 25% of the population within the impacted regions of Missouri has access and functional needs.

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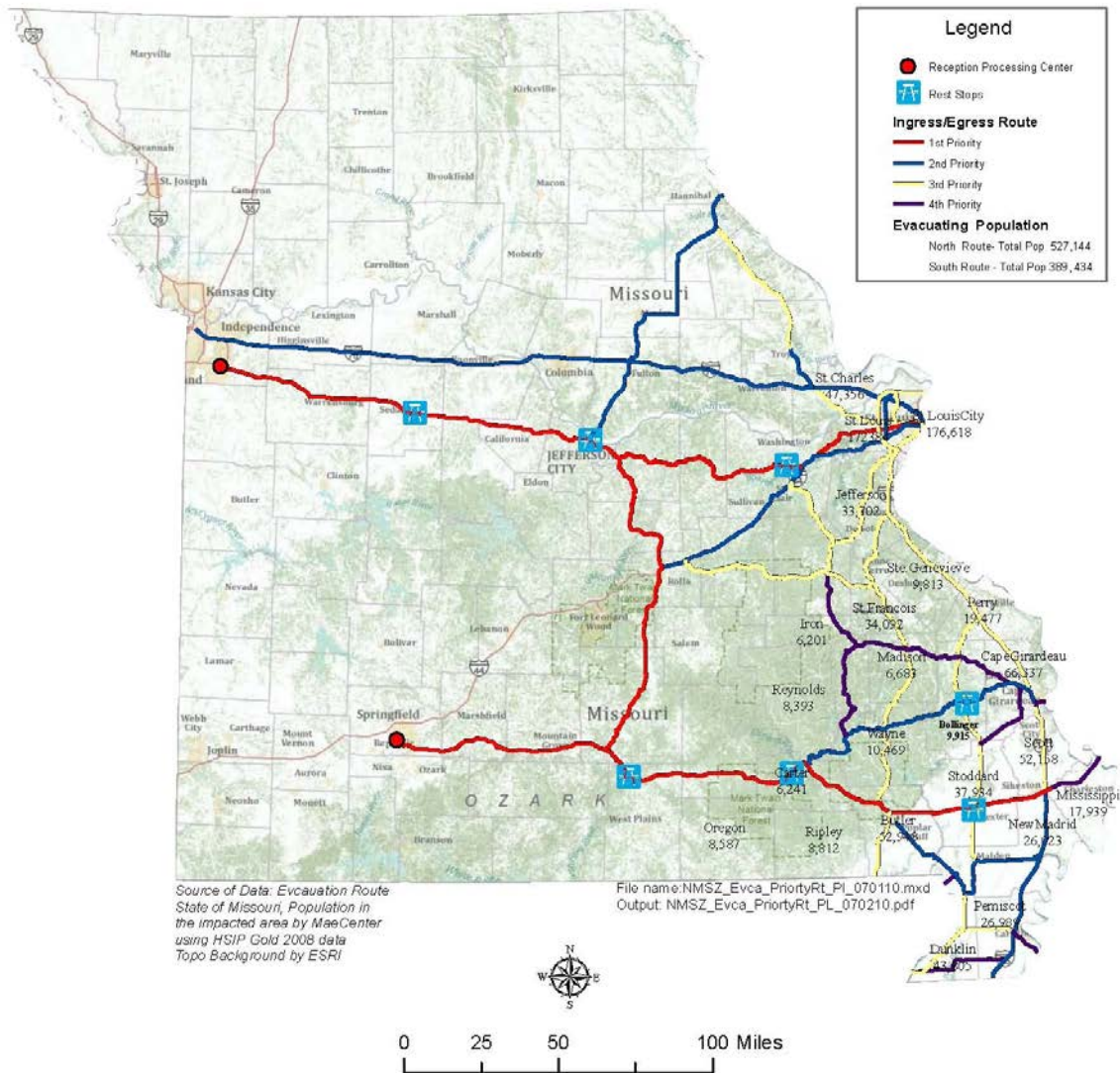
Appendix C8 – ESF-8, Public Health and Medical Joint Missouri & Region VII Response Operations Plan

- Individuals with access or functional need must be sheltered in congregate care shelters.
- Individuals with a life-threatening conditions or who pose a danger to themselves and others may be sent to a hospital or medical shelter.
- Approximately 55,630 people with access and functional needs will require sheltering according to the MAE Center. Nearly 612,000 individuals in Missouri Region C and E have access and functional needs according to MDHSS.
- For this catastrophic plan, access and functional needs are defined as physical and psychological disabilities.
- Shelters must meet the spirit of the Americans with Disabilities Act (ADA). If not ADA-compliant, a shelter must seek to accommodate access or functional needs as expeditiously as possible.
- Although shelters may have a level of specialized equipment available, insufficient resources exist to provide such equipment to many locations at once. The American Red Cross (ARC) will plan to meet these needs in conjunction with local emergency management, public health, private healthcare providers, and private durable medical equipment providers to meet these needs. ARC will make every attempt to accommodate access and functional needs, but may also seek assistance from local emergency management, the State of Missouri, and the Federal Government should needs overwhelm available resources.
- Shelter management must recognize the need to keep people with disabilities together with their respective mobility devices, service animals, accompanied caregivers, and/or other durable medical equipment together.
- Shelters must also develop a plan for transferring/transporting patients to appropriate medical locations, if required. ARC will work with local emergency management, public health, and other partners to coordinate transportation.
- Limited capacity exists to store and process human remains within Missouri including fatalities resulting from the incident and unearthed corpses at cemeteries
 - According to the MAE Center, health and medical operations must support identification, processing, and disposition of approximately 686 fatalities as a direct result of the earthquake. The actual number of fatalities may be higher due to cascading impacts such as traffic accidents, heart attacks, hazardous materials (HAZMAT) exposures, and other causal factors. MDHSS estimates up to 2,485 deaths resulting from the earthquake and cascading incidents.
 - Post-mortem processing of human remains will require cultural sensitivity, respectful care, and resource augmentation.
- Health and medical operations may be required to support limited environmental health operations such as validation of water supplies and vector control.

In addition to the considerations above, projected road and bridge damage may physically split operations into Northern and Southern Operations within the State of Missouri as described in Figure C8-1. Priority routes are subject to change based on initial assessment following an earthquake event. Post-earthquake conditions and accumulated debris may severely impact ESF-8 operations and necessitate reliance on rotary wing operations. As shown in the Figure, ground transportation operations are likely to occur between the St. Louis area and Kansas City via US Highway 50 and/or Interstate 70, and between

Southeast Missouri and Springfield via US Highway 60. These four-lane highways provide the best opportunity to support ground operations to and from the impact zone. As other roads are assessed post-earthquake and debris removal is complete, additional ground operations may be possible. Priority routes may change depending on the impacts of the disaster.

Figure C8-1 Evacuation Map, Northern and Southern Routes



1.3 Assumptions

1.3.1 Damage Assumptions

Casualties

Numerous counties in southeast Missouri will incur a substantial number of casualties. Additionally, Jefferson and St. Louis Counties, along with the City of St. Louis, may incur large numbers of casualties. MAE Center and MDHSS data are provided in Table C8-4.

Table C8-4 Casualty and Hospital Damage Summary

Data Element	MAE Center Data	MDHSS Data³
Fatalities	686	4,735
Injuries	13,434	92,719
Level 1 (red – life-threatening injuries)	360	2,485
Level 2 (yellow – require hospital care)	2,897	19,995
Level 3 (green – require medical aid)	10,177	70,240
Total Hospital Facilities Statewide	208	164
Total Facilities Lost	7	61
Total Hospital Beds Statewide	27,343	22,031
Total Hospital Beds Lost	846	10,715

Transportation Infrastructure

Road damage due to the earthquake will impede land-based ambulances supporting ESF-8 operations.

Structural Damage

According to the MAE Center, impacted counties house an estimated 9,426 hospital beds. Approximately 28% of those beds will be out of service during the first 30 days. A total of eight hospitals located in Cape Girardeau, Dunklin, Pemiscot, Scott, and Stoddard Counties provide approximately 1,100 beds. On day one following an earthquake, roughly 80 beds will be available while the remaining 1,020 beds will unusable due to damage from the earthquake. A substantial number of hospitals and other critical facilities in eastern Missouri will be without electric power, and communication capabilities will be severely impacted.

MDHSS data indicate that as many as 10,715 hospital beds will be unavailable for use as a result of the earthquake and cascading incidents throughout Missouri Regions C and E. MAE Center and MDHSS data both indicate a substantial need for hospital support outside the State of Missouri.

1.3.2 Federal Planning Assumptions

- Health and medical response capabilities and resources of the local jurisdictions and the State are insufficient, overwhelmed, and exhausted.
- Health and medical transportation operations in the hardest hit areas occur via rotary wing.
- The number of casualties and/or displaced persons is large, possibly in the tens to hundreds of thousands.
- Massive disruption of the area’s public health and medical systems occurs.
- Significant shortage of response and casualty/evacuee reception capabilities, equipment, and medical care occurs.
- Health and medical resources under the direct control of the State of Missouri are maximized and augmented by mutual aid and federal resources.

³ MDHSS data considers indirect fatalities due to cascading incidents and additional data regarding the St. Louis area.

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- During a NMSZ incident, ESF-8 operates under a declaration of public health emergency which may:
 - Waive certain provisions of the Social Security Act that authorize Medicare, Medicaid, and State Children’s Health Insurance Program (SCHIP), and sanctions that apply under Emergency Medical Treatment and Active Labor Act (EMTALA).
 - Trigger use of the Public Health Emergency Fund if Congress has made appropriations to that fund.
 - Allow temporary appointments (up to one year or duration of the emergency) to positions that directly respond to the public health emergency when the urgency of filling positions prohibits examining applicants through the competitive process, and waive dual compensation for temporarily re-employed annuitants to support surge capacity needs in hospitals and aid stations. Note: other emergency hiring authorities may be used without declaring a public health emergency.
 - Allow access to “no-year” funds if appropriated to the Public Health Emergency Fund. The Secretary of USDHSS must report any expenditure to Congress within 90 days after the end of the fiscal year. These funds supplement and do not supplant, other federal, state, and local funds provided for public health grants, awards, contracts, and investigations.
 - Allow extensions or waivers of sanctions relating to submission of data or reports required under laws administered by the Secretary, when the Secretary determines that, wholly or partially as a result of a public health emergency, individuals or entities are unable to comply with deadlines. The Secretary must notify Congress and publish a Federal Register notice before or promptly after granting an extension or waiver.
 - Allow waiver of the following requirements specified in Section 1135 of the Social Security Act, temporary waiver of certain Medicare, Medicaid, (including EMTALA), SCHIP, and Health Insurance Portability and Accountability Act (HIPAA) requirements—in order to ensure that sufficient health care items and services are available to meet the needs of individuals enrolled in Social Security Act programs in the emergency area and time period:
 - Conditions of participation or other certification requirements, or program participation and similar requirements for individual providers or types of providers.
 - Pre-approval requirements for providers or health care items or services.
 - Requirements that physicians and other health care professionals including mental health professionals hold licenses in the state in which they provide services if they have a license from another state (and are not affirmatively barred from practice in that state or any state in the emergency area). Note, however, that this waiver is for purposes of Medicare, Medicaid, and SCHIP reimbursement only—the states determine whether a provider is authorized to provide services in the state without state licensure.
 - Sanctions under EMTALA for redirection of an individual to another location to receive a medical screening examination pursuant to a state emergency preparedness plan or transfer of an individual who has not been stabilized if the transfer arises out of emergency circumstances. A waiver of EMTALA

requirements is effective only if actions under the waiver do not discriminate on the basis of a patient's source of payment or ability to pay.

- Sanctions related to Stark Law self-referral prohibitions⁴, which would otherwise apply when a physician refers a patient for services to a provider in which the physician has a financial interest.
- Restrictions against modifications of deadlines and timetables for performance of required activities.
- Limitations on payments to permit Medicare+Choice enrollees to use out of network providers in an emergency situation (but, to the extent possible, the Secretary shall reconcile payments so that enrollees do not pay additional charges and so that the plan pays for services included in the capitation payment).
- Sanctions and penalties arising from noncompliance with HIPAA privacy regulations relating to: (1) obtaining a patient's agreement to speak with family members or friends or honoring a patient's request to opt out of the facility directory, (2) distributing a notice of privacy practices, or (3) the patient's right to request privacy restrictions or confidential communications. The waiver of HIPAA requirements is effective only if actions under the waiver do not discriminate based on a patient's source of payment or ability to pay.

For the purposes of waiver, what constitutes an "emergency area" and an "emergency period" is determined by a presidential declaration of an emergency or disaster and a secretarial declaration of public health emergency.

Waivers may be retroactive to the beginning of the emergency period (or any subsequent date). Waivers or modifications terminate either upon termination of the emergency or 60 days after the waiver or modification is first published (subject to 60-day renewal periods). However, HIPAA and EMTALA waivers are limited to a 72-hour period beginning upon implementation of a hospital disaster protocol. Such waivers may require renewal if operations continue past 72 hours.

Congressional notification is required at least two days before formally exercising the waiver authority.

1.3.3 State Planning Assumptions

- The earthquake will yield an overwhelming number of injured and homeless people in need of care, treatment, shelter, and feeding.
- The earthquake will yield an overwhelming number of fatalities requiring identification, processing, and disposition.
- Communication between hospitals and government agencies may be limited due to wide-spread damage to communication installations and incompatible systems and equipment.
- Deployment of health and medical supplies to the impact zone may be adversely affected by the damaged transportation network.
- Security will be a concern at sites providing health and medical care and congregate care.

⁴ The Stark Law bars self-referrals for clinical laboratory services under the Medicare program, effective January 1, 1992, as part of the Omnibus Budget Reconciliation Act of 1993.

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- Temporary modifications to the Missouri Department of Mental Health (MDMH), Division of Developmental Disabilities 1915c waivers may be necessary under the direction of the Center for Medicare and Medicaid Services and MO HealthNet. Approximately 1/3 of consumers of developmental disabilities services receive waiver services.
- A significant number of people will be leaving the impact zone, either by self-evacuation or with support of federal, state and local authorities. Estimates of evacuation flow amount to 25% of the population within the impact zone. A certain percentage of those evacuees will have injuries and require care outside the impact zone. Evacuation operations may adversely affect transport of assets to support other operations.
- Within the affected area, the entire healthcare system's ability to provide services will be severely degraded. The full spectrum of the healthcare system will be affected including long-term care facilities, outpatient clinics, surgical centers, public health departments, emergency medical services (EMS), individual healthcare providers' offices, birthing centers, and in-home healthcare providers.
- The number of casualties, combined with the impact to the healthcare delivery system, will exceed the capacity of hospitals and other healthcare system providers within the impact zone.
- Missouri 1 (MO-1) Disaster Medical Assistance Team (DMAT) may be available onsite within 12 to 24 hours, depending on the availability of transportation and damage to infrastructure.
- Federal DMATs may be available onsite within 48 hours depending on the availability of transportation and damage to infrastructure.
- The earthquake will raise significant environmental, public, and mental health issues. As a result, medical support will not only be needed at medical facilities but also at Consolidated Assistance Sites (CAS) (see Figure C8-3), evacuation points, and shelters. Requirements for psychosocial support will quickly exhaust local, state, and federal capabilities, necessitating coordination with the private sector and pastoral community.
- Healthcare facilities rely on "just-in-time" delivery of medical supplies, equipment, and pharmaceuticals, and have supplies on hand for normal operations that will last only 24 to 48 hours. Medical response demands will greatly exceed the on-hand medical supplies within the impact zone.
- Medical care in shelters will be a significant challenge. Deployment of federal medical personnel and equipment to support medical needs in shelters will be required.
- Water supplies (both potable and non-potable) and sewer systems will be compromised. Similarly, loss of power will be only partially met by auxiliary power sources, dramatically complicating efforts to satisfy medical needs of the affected population.
- Medical support will be required to assist emergency responders in dealing with significant environmental, public health, and mental health issues resulting from the earthquake.
- Special and chronic medical needs, including dietary, pharmaceutical, and therapeutic needs, will be in great demand for individuals in mass care facilities and for people sheltering at home who do not have access to normal healthcare support.
- Hospitals, dialysis clinics, and health facilities in the affected area may not be functional or accessible after the incident due to structural damage, injuries to personnel, and/or inability of response teams to assess damage or offer assistance.

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- MDHSS-regulated child care operations and long-term care facilities will be similarly affected. MDHSS-regulated food and lodging establishments will likely be non-functional.
- An increased risk for injuries, illness, and death may occur due to hazards including physical hazards and crush injuries; HAZMAT exposures; unsafe living conditions including lack of sanitation; lack of potable water and safe food; lack of medicines, electricity, and access to medical services for those requiring care; and increases in hypothermia or hyperthermia, depending on the time of year.
- Mortuary services (i.e., funeral home operations, coroner services, and the ability to file death certificates or perform cremations or burials) may be disrupted or unavailable at a time of increased mortality.
- Due to increased difficulty in ingress and egress operations, outside assistance may require 96 hours or more to reach the affected area.
- State-owned facilities such as veteran's homes, mental health facilities, etc., may have limited resources that will affect their ability to maintain self-sufficiency.

1.4 Limiting Factors

A catastrophic NMSZ earthquake will significantly affect seven states and millions of people. The area within 35 miles of the fault's epicenter may be subjected to shaking intensity of VIII or greater on the Modified Mercalli Intensity (MMI) Scale. Such intensity is strong enough to destroy well-built structures, damage dams and reservoirs, cause landslides, and severely damage or destroy transportation structures such as highways, bridges, airports, and railroad tracks. Cascading damages caused by the collapse of water, sewer, pipelines, natural gas, and other critical infrastructure will reduce local capabilities and may cause fires, HAZMAT spills, loss of utilities, and other incidents that further complicate the situation. The area can expect significant numbers of aftershocks at various levels of severity for months following the initial earthquake. Those aftershocks could further damage the area's infrastructure. Damages will also affect logistics of delivering supplies and services. This incident may present the following limitations to response operations:

- Impacted federal regions may be operating in a continuity of operations environment which could lead to degraded ability to fulfill ESF-8 responsibilities.
- Transportation infrastructure across the impact zone will be extensively damaged, slowing movement of health and medical resources to the impact zone.
- Communications infrastructure across the impact zone will be extensively damaged and will adversely impact situational awareness.
- Projections indicate significant potential gaps in human resources and other assets to support health and medical operations.
- Space and locations to support health and medical operations will be lacking.
- The volume of work and stresses in the environment will tax health and medical operations.

2.0 Mission

The mission of the joint local/state/federal response organization is to save and sustain human life, minimize suffering, stabilize and restore critical infrastructure and key resources (CI/KR), and set the conditions for recovery following a catastrophic earthquake in the State of Missouri. ESF-8 Mission-essential Tasks include:

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- Lead and coordinate emergency and acute care operations, and support efforts to sustain medical surge capacity.
- Coordinate medical care for those with access and functional needs and medical needs at congregate shelters.
- Support patient evacuation and movement.
- Re-establish and maintain limited environmental health services to support critical needs such as food and water quality inspection.
- Lead and coordinate mass fatality operations.

During disaster response, government at all levels is responsible for mobilizing all available resources to protect lives and property and relieve suffering. The first priority of all response agencies is the direct preservation of life. Initial ESF-8 priorities include:

- Coordination of medical support of injured victims found during search and rescue (S&R) efforts.
- Coordination of ambulance, air ambulance, triage, and life-essential medical services, including evacuation of Level 1 patients.
- Coordination of treatment of Level 2 and 3 patients and prioritized evacuation.
- Coordination of care of people with access and functional needs and medical needs, and support for prioritized medical evacuation.
- Initial staging of assets to support mass fatality operations.

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases of execution. The (sub)phases of Phase 2 are identified in **Table C8-5**.

Table C8-5 Response Phase Operational Periods

Response Phase	Operational Period
2a – Activation/Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Sustained Response	E + 72 – E + 120 hours +

The response phase and operational periods are designed to be flexible, as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

3.1.1 General Concepts

The volume of medical treatment, medical evacuation, and medical surge needs combined with the logistical challenges associated with rotary wing operations necessitates an integrated support system to facilitate effective response. Figures C8-2 and Figure C8-3 below provide a conceptual model for integrated support of ESF-8 and ESF-6 functions.

Figure C8-2 Medical Operations and Evacuation Concept Diagram

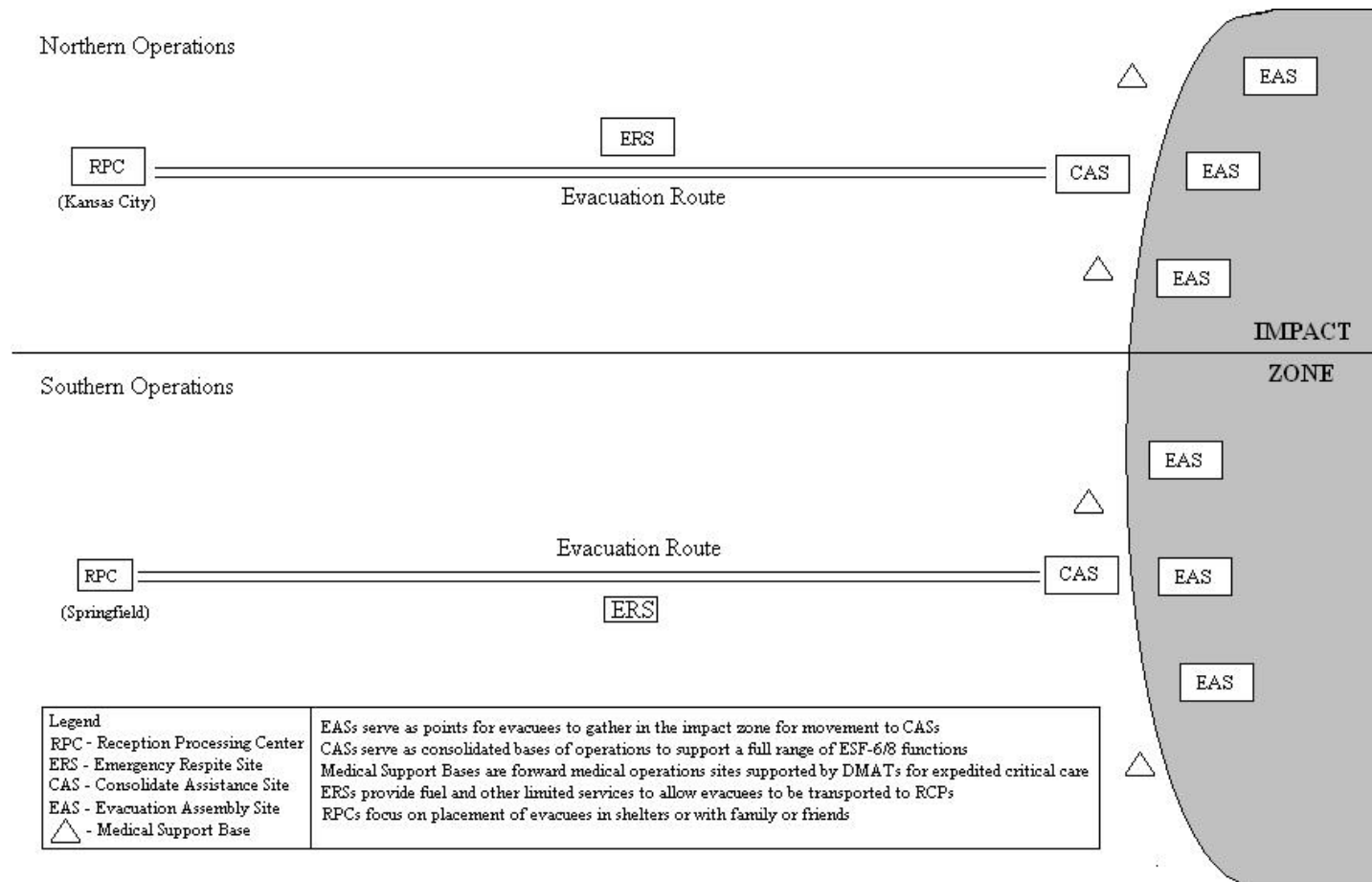
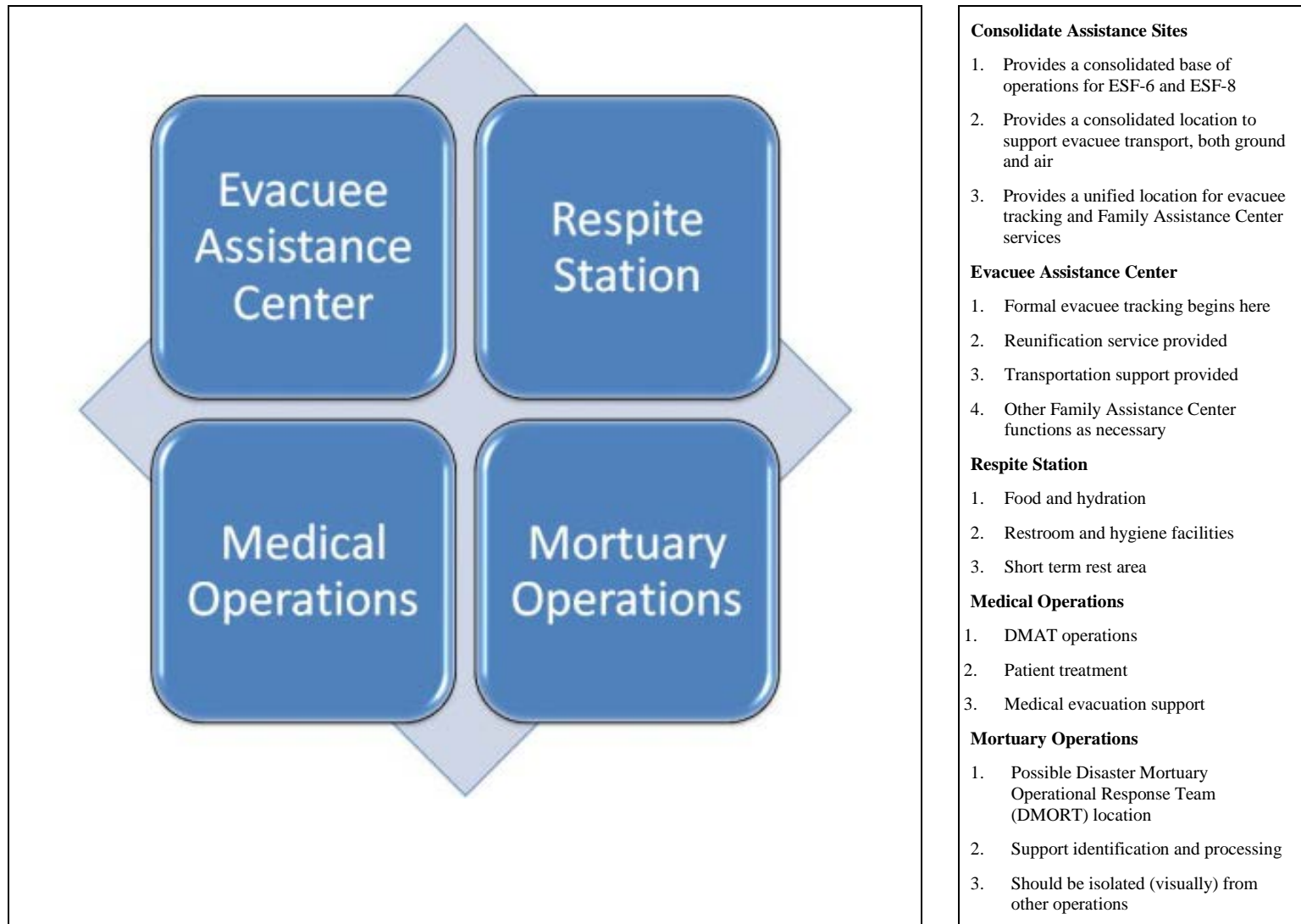


Figure C8-3 Consolidated Assistance Site Diagram



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Further descriptions of the function-specific sites are as follows:

- Evacuation Assembly Site (EAS) – A locally operated location where evacuees will be directed to receive assistance. These sites may also serve as a local collection point for S&R Operations. Support should include food, water, and restrooms as well as any available medical support. Evacuees will move from this site to a Consolidated Assistance Site (CAS).
- Medical Support Base (MSB) – A state and federally supported forward location to support medical triage, treatment, and evacuation. MSBs may be located in the impact zone if conditions are warranted. Depending on injury type and severity, medical evacuees will move from this site to a CAS or directly to a hospital facility outside of the impact zone.
- Consolidated Assistance Sites (CAS) – A state and federally supported location where evacuees will be directed and assembled prior to significant relocation. Medical teams will be stationed at each location to support medical treatment and medications will be available. This facility will be the consolidation location for each of the locally operated EASs. Each CAS will provide the following services: (1) Evacuee Processing and Family Assistance, (2) Respite (food, water, personal hygiene and short-term rest), (3) Medical Operations (patient treatment, medical evacuation, etc.), and (4) Mortuary Operations. Mortuary and patient/family operations will not be directly co-located but rather located in the same proximity to facilitate more efficient logistics, resourcing, and transportation. Formal evacuation tracking will be initiated at CASs. Evacuees will move from these sites to a Reception Processing Center (RPC) for shelter placement and other shelter services.
- Emergency Respite Site (ERS) – A location along the evacuation route between the CASs and RPCs that will provide water and fuel only.
- Reception Processing Center (RPC) – These locations will receive evacuees and direct them to locations where they can seek short-term shelter. These locations will have mass-care capability (500 persons), medical support, and access to medications. Evacuees will move from this site to Congregate Shelters or other shelter options.
- Congregate Care Shelters – These facilities will support both the general population and those individuals with access and functional needs and individuals with certain chronic medical needs. These shelters will serve a minimum of 500 persons and will support temporary lodging, food, hydration and medical services.

This support system is designed to meet cross-functional needs of ESF-6 and ESF-8, to provide an achievable transportation model for patients, evacuees, and resources, and to place an upper limit on the number of sites to which health and medical assets must be transported. Other definitions that may be useful in joint ESF-6 and ESF-8 operations include:

- Welcome Center – A location where a larger host city may process evacuees and route them to a specific sheltering location; this may also be the location where assistance programs and other resources are shared. This will not be a shelter.
- Host City – Jurisdictions throughout the State capable of hosting and sheltering evacuees.
- Self-Evacuees – Individuals who evacuate the area via personally arranged methods.
- Transportation-Assisted Evacuees – Individuals who require assistance in evacuating the area due to lack of transportation or inability to self-evacuate.

3.1.2 Phase Response Concepts

3.1.2.1 Phase 2a Immediate Response

Purpose of Phase

The primary purposes of this phase are to notify and activate all ESF-8 response organizations, establish systemic lines of communication among local, state, and federal ESF-8 response agencies, and to develop a common operating picture (COP) for ESF-8 concerns. Achieving these goals will provide information to define incident-specific ESF-8 priorities and to set an initial course for deployment of assets.

End State of Phase

The desired end state of this phase is full development of a command and control structure to allow deployment of health and medical response assets.

Local Mission-essential Tasks

Local Public Health Agencies

1. Deploy staff to the field to survey their communities and report their findings to the Local Emergency Operations Center (LEOC) and/or to the DSR if the LEOC is not operational.
2. Activate staff to determine where medical Points of Distribution (POD) will be located and communicate that information to the MDHSS DSR. Medical PODs may be co-located with PODs supporting commodities distribution.
3. To the extent possible, coordinate patient care in affected areas in conjunction with local hospitals and medical responders.
4. Coordinate procurement of medical supplies with support from MDHSS.
5. LPHAs will activate local SNS plans.
6. Submit resource requests to the LEOC.
7. Assist with hospital evacuation as able.

Local Hospitals

1. Rapidly assess their ability to (1) continue to care for the patients within their facility and (2) provide for an influx of disaster victims.
2. Enter their status on the EMSsystem and inform their LPHA who will share this information with the LEOC.
3. Have a structural engineer evaluate each damaged facility as soon as possible after the earthquake.

Local Law Enforcement

Local law enforcement agencies will coordinate local emergency communications as able.

Local Emergency Medical Services

Respond to immediate medical needs of those injured in the earthquake and set up medical triage areas and casualty collection points which may also serve as EASs.

State Mission-essential Tasks

Missouri Department of Health and Senior Services

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1. Activate the DSR to provide logistical and communications support to MDHSS, hospitals, and local public health departments in the affected area(s).
2. Coordinate State-UCG with hospitals, LPHAs, and other stakeholders in the impact zone to gain situational awareness regarding health and medical conditions. Key elements include:
 - a. Assess damage to hospitals and other key ESF-8 critical infrastructure.
 - b. Assess status of congregate care, hospitals, and EMS.
 - c. Develop status reports on casualties and building damage.
 - d. Perform a state-wide bed poll if possible or obtain bed availability manually from each facility as needed.
 - e. Gather information for FEMA Crisis Counseling Program Grant.
 - f. Assess status of interoperable communication systems within all healthcare facilities.
 - g. Assess status of medical supplies.
3. Through the DSR, activate communications plans and demonstrate availability of HAM radios and satellite phones.
4. Activate ESF-8 auto-response plans to regions for which communication cannot be established.
5. Send a representative to the SEOC to support the Human Services Branch, ESF-8, Health and Medical Operations.
6. In coordination with federal ESF-8, determine needs and evaluate the impact of the earthquake on the medical delivery system. Based on that evaluation, request federal ESF- 8 resources as needed through the SEOC. The SEOC will forward requests to the FEMA Regional Response Coordination Center (RRCC), where federal ESF-8 representatives will review the requests. As needed, request:
 - a. Secretary’s Public Health Emergency Declaration.
 - b. Activation of the National Disaster Medical System.
 - c. Activation of FEMA Ambulance Contract.
 - d. Mutual aid through the Heartland Planning Coalition.
 - e. Federal 1135 B waiver from USDHHS.
 - f. Deployment of Strategic National Stockpile (SNS) assets including medical equipment and supplies to support hospitals, healthcare facilities, alternate care sites, MDMH facilities, and shelters.
 - g. Deployment of MO-1-DMAT equipment and staff and issue requests for additional DMAT teams.
 - h. Deployment of Federal Medical Station (FMS) to support medical surge.
7. If initial assessment indicates that patient evacuation is required, determine if assistance is needed either through the Emergency Management Assistance Compact (EMAC) or through federal ESF-8 resources and make appropriate contacts to summon EMAC and federal resources.
8. After consulting with local health and hospital representatives, determine what type of additional assistance is needed either through EMAC or federal ESF-8 resources. Federal ESF-8 Pre-Scripted Statements of Work for earthquake response are provided in Section 6.4.

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9. Determine shortfalls in beds, medical professionals, medical supplies, and equipment in conjunction with local health, EMS departments, Missouri Hospital Association (MHA), Mid-America Regional Council (MARC), and St. Louis Area Regional Response System (STARRS).
10. Provide public information regarding where and how to access medical care with input from LPHAs, hospitals, and federal ESF-8 representatives.
11. In coordination with the MHA, MARC, and STARRS hospital preparedness program coordinators, determine appropriate placement of and activate medical support trailers (Mass Casualty Incident and Medical Surge Trailers).
12. Develop a deployment plan for the Mobile Medical Unit (MMU) located in Taney County to support a damaged or destroyed hospital or to provide surge capacity for a single hospital.
13. If appropriate, activate ambulance services or other transportation modes that have Memorandums of Understanding (MOU) in place with transportation companies to move patients to available facilities.
14. Coordinate movement of MO 1-DMAT equipment and staff to the area.
15. Activate the Receipt, Staging, and Storage (RSS) Warehouse for receipt of SNS assets.
16. In conjunction with the MFDEA, assess local mortuary capacity and capability in impacted zones and determine resource needs.
17. In conjunction with the MFDEA, coordinate activation and staging of the MFDEA Disaster Response Team (DRT) and request the Region VII DMORT, as needed.
18. Identify long-term care and other non-traditional facilities that might be suitable to house ill patients.
19. Prepare to activate Missouri's Show-Me Response Program (ESAR-VHP) to provide screening of health care volunteers.
20. Work with the Governor's Office to obtain signed and executed Executive Order recognizing licenses of out-of-state health care providers and liability issues and a plan to integrate volunteers from unaffected states.
21. Coordinate with the MDMH to provide surge capacity crisis counseling to include emergency workers.
22. Plan to integrate volunteers from unaffected states and consider altered standards of care.
23. Provide a Public Information Officer (PIO) to staff the Joint Information Center (JIC) at the SEOC.
24. Provide staffing for the evacuation management team.
25. Activate inspection teams, as available, to support hospital inspections.
26. Work with the Governor's Office to obtain an Executive Order to designate a central medical examiner.
27. Coordinate activation of Family Assistance Centers to support reunion of separated families, services to displaced persons, and mental health services.

Missouri Department of Mental Health

1. Activate Incident Command at the Central Office and supply staff to the SEMA EOC. If available, staff will also deploy to the MDHSS DSR.

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2. Coordinate surge capacity crisis counseling to include emergency workers.
3. Provide a Public Information Office to staff the JIC at the SEOC.
4. Determine need to evacuate mental health patients/consumers from state-run facilities. The Division of Developmental Disabilities will require medical support for the unique needs associated with the transport of persons with severe disabilities, including EMS and ambulance assistance.
5. Through the Division of Developmental Disabilities Service Coordination, continue to provide case management for consumers with developmental disabilities to support continuity of services and supports for individuals in the earthquake zone as possible and for displaced individuals.
6. Coordinate with Administrative Agents (community mental health centers) to assess FEMA Crisis Counseling Program (CCP) needs in impacted and evacuee areas.
7. Request security assistance as needed to transport maximum and medium security patients being evacuated from the NMSZ.
8. Request federal assets through MDHSS that could include mental health professionals for substance abuse and crisis counseling and facility psychiatric and developmental disability specialists to assist at facilities. These requests may include EMAC, NDMS mental health teams and other assets available through federal ESF-8
9. Work with the Substance Abuse and Mental Health Services Administration (SAMHSA) to coordinate mental health response and submit FEMA CCP.
10. At the request of MDHSS or SEMA, activate the DMH Show-Me Response unit.

Missouri National Guard

1. Support movement of trailers and other large medical support equipment and other transportation requirements
2. Assist with facility security as needed at mass treatment and care sites.
3. Coordinate with other agencies to meet staging area requirements.

Missouri State Highway Patrol

1. As the lead for law enforcement response, coordinate with MDHSS to provide security at triage and treatment sites and SNS RSS sites.
2. Provide emergency communications within affected areas.

Missouri Department of Corrections

Assist with transportation needs.

Federal Mission Essential Tasks

U.S Department of Health and Human Services

1. Deploy a federal ESF-8 Liaison to the Joint Field Office (JFO) and make contact with the SEOC and the MDHSS DSR to coordinate federal support to the State.
2. Activate the federal ESF-8 Incident Response Coordination Team.
3. In conjunction with the SEOC and MDHSS, assess the need for supplies, pharmaceuticals, and equipment through the NDMS. See Section 6.4 for federal ESF-8 Pre-Scripted Statements of

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Work for earthquake response and Section 6.5 for a description of NDMS asset available during earthquake response.

4. Federal ESF-8 officials will consider and process requests for resources including requests for SNS assets, requests for activation of the NDMS and other critical requests.

U.S. Department of Agriculture

Provide appropriate personnel, equipment, and supplies—primarily for communications, aircraft, and establishment of base camps for deployed federal public health and medical teams. Resources will be assigned commensurate with each unit's level of training and the adequacy and availability of equipment. ESF-4 – Firefighting or the USDA/Forest Service Disaster and Emergency Operations Branch is the contact for this support.

U.S. Department of Defense

1. Alert Department of Defense (DOD) NDMS Federal Coordinating Centers (Army, Navy, Air Force) and provides specific reporting/regulating instructions to support incident relief efforts.
2. Alert DOD NDMS Federal Coordinating Centers to activate NDMS patient reception plans in a phased, regional approach, and when appropriate, in a national approach.

U.S. Department of Homeland Security

1. Assist in providing information/liaison with emergency management officials in NDMS Federal Coordinating Center areas.
2. Identify and arrange for use of DHS/United States Coast Guard aircraft and other assets in providing urgent airlift and other transportation support as needed.

Federal Emergency Management Agency

1. Provide logistical support for deploying ESF-8 medical elements required and coordinates the use of distribution centers/staging areas, transportation of resources, use of disaster fuel contracts, emergency meals, potable water, base camp services, supply and equipment resupply, and use of all national contracts and interagency agreements managed by DHS for response operations.
2. Provide tactical communications support through Mobile Emergency Response Support (MERS), inclusive of all types (i.e., deployable satellite and RF/radio communications).

U.S. Department of the Interior

Provide appropriate personnel, equipment, and supplies—primarily for communications, aircraft, and the establishment of base camps for deployed federal public health and medical teams. Resources will be assigned commensurate with each unit's level of training and the adequacy and availability of equipment. ESF-4 or the Department of the Interior Operations Center is the contact for this support.

U.S. Department of Labor

Coordinate safety and health assets of cooperating agencies and the private sector to provide technical assistance and conduct worker exposure assessment and responder and worker risk management within the Incident Command System (ICS). This assistance may include 24/7 site safety monitoring; worker exposure monitoring; health monitoring; sampling and analysis; development and oversight of the site-specific safety and health plan; and personal protective equipment (PPE) selection, distribution, training, and respirator fit-testing.

U.S. Department of Transportation

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1. Provide technical assistance in identifying and arranging for all types of transportation, such as air, rail, marine, and motor vehicle, and accessible transportation in collaboration with DOD, General Services Administration (GSA), and other transportation-providing agencies.
2. At the request of ESF-8, provide technical support to assist in arranging logistical movement support (e.g., supplies, equipment, blood supply, etc.) from Department of Transportation (DOT) resources, subject to DOT statutory requirements.

U.S. Department of Veterans Affairs

1. Alert the Department of Veteran’s Affairs (VA) Federal Coordinating Centers and provides reporting instructions to support incident relief efforts.
2. Alert VA Federal Coordinating Centers to activate NDMS patient reception plans in a phased, regional approach, and when appropriate, in a national approach.

General Services Administration

Provide resource support for ESF-8 requirements as requested to meet the needs of the affected population.

3.1.2.2 Phase 2b Deployment

Purpose of Phase

The purpose of this phase is to deploy necessary assets to sustain systematic health and medical response operations scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is a defined and systematic health and medical response operation which is characterized by a consistent staffing plan and resource request and processing system. Consistent staffing and resourcing allows efficient and effective processing of health and medical needs at a defined pace.

Local Mission-essential Tasks

Hospitals

1. Determine which patients will be evacuated and assume responsibility for moving these patients to the EAS in consultation with local public health agencies.
2. Support treatment of patients as able and request resources through the LEOC as needed to sustain operations.

Local Public Health Agencies

In consultation with MDHSS, determine how to provide for the health and medical needs of the shelter populations within the impact zone.

Emergency Medical Services

1. Support transport and treatment of patients as able and request resources through the LEOC as needed to sustain operations.
2. Provide ground transportation of patients to operational hospitals in the impact zone and transport medical evacuees to EASs as needed.

Local Social Services and Mental Health Agencies

Assist with mass care and crisis counseling for victims and local responders, as able.

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MFDEA (local members)

Coordinate mortuary services as able.

State Mission Essential Tasks

Missouri Department of Health and Senior Services

1. Coordinate ambulances to transport patients from evacuated hospitals, long-term care facilities, or other triage points to the designated helispot for patient evacuation.
2. Request support via EMAC and the National Ambulance Contract as necessary.
3. Provide overall coordination of the State's health and medical services.
4. Consult with hospitals to designate which patients will be evacuated.
5. Coordinate delivery of medical personnel and supplies to affected areas and movement of patients to available facilities when requirements for patient care exceed local resources.
6. Collaborate with the MHA, MARC, and STARRS to provide regional coordination of direct patient care including triage, decontamination, isolation, and documentation.
7. Participate in the EMT if activated.
8. Coordinate through the SEOC with United States Transportation Command (USTRANSCOM) to support NDMS activation and medical evacuation (MEDVAC) missions to move patients from the impact zone to designated Federal Coordinating Centers for definitive care.
9. Coordinate with SEOC, Defense Coordinating Officer (DCO), and USTRANSCOM to designate an airport with sufficient movement on the ground as a site for patient evacuation. As defined in this plan, the site may be an EAS or CAS.
10. In association with federal ESF-8, request medical resources through EMAC. Resources may include additional ambulances; medical professionals, such as physicians, nurses, hospital-based social workers and chaplains, and other ancillary support personnel; medical equipment and supplies; additional surge capability, such as field hospitals; and federal ESF-8 resources such as DMATs. ESF-8 liaison with state ESF-8 should ensure EMAC resources are requested prior to requesting federal assets.
11. Coordinate medical volunteer professional resources through Show-Me Response.
12. Coordinate medical support to all congregate shelters by deploying available medical personnel through Show-Me Response, EMAC or requests for federal ESF-8 resources.
13. Coordinate basic medical care and public health surveillance at shelters using registered nurses provided through MDHSS or federal ESF-8 resources that are available.
14. Through SNS assets, support people with chronic illnesses via provision of maintenance medications and any necessary medical supplies.
15. Coordinate with LPHAs and local mass care and sheltering coordinators to monitor all aspects of public health in shelters by conducting disease surveillance and implementing interventions necessary to ensure disease outbreak is prevented in shelters.
16. Coordinate with local and federal partners to implement use of the Joint Patient Assessment and Tracking System and the National Mass Evacuation Tracking System and coordinate integration of current state tracking system(s) including EMTrack.

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17. Coordinate and deliver risk communications and public health information through the MDHSS PIO/JIC and appropriate local public health agencies during the response effort in order to gain public confidence by providing accurate, timely, and pertinent information to prevent public panic; directing public action; meeting the needs of the news media; and coordinating with other agencies involved in responding and providing information to the public.
18. In consultation with the MFDEA, develop and disseminate guidance to all responding personnel, including S&R and law enforcement personnel, instructing as to the handling, care, and reporting of dead bodies.
19. In consultation with the MFDEA, deploy necessary mortuary assets, including personnel, equipment, and supplies through the MFDEA-DRT and the Region VII (and others if available) DMORTs.
20. In consultation with MFDEA, coordinate establishment (as needed) of Regional Mortuary Collection Sites and of Family Assistance Centers in concert with the establishment of the Consolidated Collection Sites.

Missouri Department of Mental Health

1. Coordinate deployment of mental health workers as available to congregate shelters at the request of MDHSS, MDSS, or ARC through SEMA SEOC.
2. Continue risk assessment and application for FEMA CCP.

Federal Mission Essential Tasks

U.S. Department of Health and Human Services

1. Request appropriate ESF-8 organizations to activate and deploy public health, medical, and veterinary medical personnel, equipment, and supplies in response to requests for federal public health and medical assistance, as appropriate.
2. Request personnel (United States Public Health Service Commissioned Corps, NDMS, Federal Civil Service, and civilian volunteers) to address public health, medical, and veterinary medical needs, as appropriate.
3. Respond to the request for NDMS activation to support patient treatment and evacuation.
4. Respond to the request for SNS assets.
5. Respond to requests for activation of the National Ambulance Contract.
6. Respond to requests for DMAT support.
7. In consultation with MDHSS, determine the need for additional health and medical resources.

Federal Emergency Management Agency

Assist in arranging transportation to support evacuating patients who are too seriously ill or otherwise incapable of being evacuated in general evacuation conveyances.

U.S. Department of Defense

1. At the request of USDHHS, provide support for the evacuation of patients and medical needs populations to locations where hospital care or outpatient services are available.
2. Using available DOD transportation resources and in coordination with the NDMS Medical Interagency Coordination Group, evacuate and manage victims/patients from collection points in or near the incident site to NDMS patient reception areas.

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3. Provide available logistical support to public health/medical response operations.
4. Provide available medical personnel for casualty clearing/staging and other missions as needed including aero-medical evacuation and medical treatment. This includes mobilizing and deploying available Reserve and National Guard medical units, when authorized and necessary to provide support.
5. USTRANSCOM will notify personnel and identify aircraft that can be used for the MEDVAC mission to move patients from impact zone to designated Federal Coordinating Centers for definitive care.
6. The Global Patients Movement Requirements Center (GPMRC) will notify the Office of the Assistant Secretary of Defense for Health and the VA Emergency Management Strategic Health Care Group to begin Federal Coordinating Center bed availability reports.
7. USTRANSCOM will designate aircraft and crews to evacuate patients.
8. USTRANSCOM will dispatch an aero medical staging unit to the designated evacuation Staging Area to coordinate patient movement.
9. GPMRC will determine which patients are evacuated to specific Federal Coordinating Centers.
10. USTRANSCOM, in conjunction with the State, will designate an airport with sufficient movement on the ground as a site for patient evacuation.

U.S. Department of Justice

Provide security for the SNS, secure movement of needed blood and blood product supply, and quarantine enforcement assistance, if required.

U.S. Department of Labor

Provide personnel and management support related to worker safety and health in field operations during ESF-8 deployments.

U.S. Department of State

Act as the health and medical services information conduit to United States Embassies/Consulates.

U.S. Department of Transportation

Coordinate with the Federal Aviation Administration (FAA) for air traffic control support for priority missions.

U.S. Department of Veterans Affairs

1. Designate and deploy available medical, surgical, mental health, and other health service support assets.
2. Coordinate with participating NDMS hospitals to provide incident-related medical care to authorized NDMS beneficiaries affected by a major disaster or emergency.
3. Furnish available VA hospital care and medical services to individuals responding to, involved in, or otherwise affected by a major disaster or emergency, including members of the Armed Forces on active duty.

U.S. Environmental Protection Agency

1. Provide technical assistance and environmental information for the assessment of the public health/medical aspects of situations involving HAZMAT, including technical and policy assistance in matters involving water and wastewater systems, for critical health care facilities.

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2. Provide support for public health matters for radiological incidents through the Federal Radiological Monitoring and Assessment Center and the Advisory Team for Environment, Food, and Health.
3. Assist in identifying alternate water supplies and wastewater collection and treatment for critical health care facilities.
4. Provide environmental technical assistance (e.g., air monitoring) and information in the event temporary interment is necessary and/or human remains are contaminated.

American Red Cross

1. Provide emergency first aid consisting of basic first aid and referral to appropriate medical personnel and facilities, supportive counseling, and health care for minor illnesses and injuries to incident victims in mass care shelters, the JFO, selected incident cleanup areas, and other sites deemed necessary by the primary agency.
2. Assist community health personnel subject to staff availability.
3. Support NDMS evacuation through provision of services for accompanying family members/caregivers in coordination with federal, state, and local officials.

3.1.2.3 Phase 2c Sustainment

Purpose of Phase

The purpose of this phase is to develop sustained health and medical response operations through defined operational periods, scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is indicated by sustainable operational periods characterized by defined resource needs and a steady state of health and medical support.

Local Mission-essential Tasks

Local Public Health Agencies

1. Work through the LEOC and DSR to disseminate information, manage resources (medications and vaccines), and provide technical assistance in mass prophylaxis, mass care, and mass fatality management.
2. Continue to deploy staff to the field and to their LEOCs to continuously survey their community in order to determine the public health and medical issues that need to be addressed and report its findings to the LEOC and DSR.
3. Through the local mass care and sheltering coordinator, work with local health care providers and local mental health providers to continue shelter medical support.
4. Provide enhanced surveillance as needed.
5. With EMS and in conjunction with MDHSS and federal ESF-8 representatives, assess the ongoing situation and communicate with the entire healthcare infrastructure.

Local Public Works Departments

Support movement of trailers and other large medical support equipment as able.

Local Law Enforcement

Coordinate to provide security at triage and treatment sites as able.

State Mission-essential Tasks

Missouri Department of Health and Senior Services

1. In conjunction with local health and EMS departments, the MHA, MARC, STARRS, MDMH, and federal ESF-8 representatives, assess the ongoing situation within the entire healthcare infrastructure and report to the SEOC concerning all ESF-8 requirements and what additional resources are required beyond the State's capability.
2. Work with appropriate state and local agencies to prevent secondary transmission of communicable diseases through patient isolation and quarantine and enhanced surveillance as the need arises.
3. Coordinate environmental and sanitation health issues with the MDNR and Missouri Department of Agriculture (MDA).
4. Gather information on the hospitals and long-term care facilities within the affected area through local MDHSS Division of Licensure and Regulation staff and through partnerships with the MHA, Missouri Health Care Association, and STARRS.
5. Prepare a daily situational briefing to be given to the department leadership.
6. In conjunction with federal ESF-8, deploy available medical resources to areas where they are most needed such as triage points, mass care shelters, or healthcare facilities that require additional medical professionals.
7. Coordinate staffing and operation of the State's MMU. Staffing can be accomplished via Show-Me Response and/or using additional medical professionals available through EMAC.
8. Communicate to federal ESF-8 if additional deployable field hospitals are needed. This need will be determined based on hazard assessments and the status of the current hospitals. The options to provide this resource include EMAC and federal ESF-8 resources.
9. Assist in managing mass fatalities in coordination with the local coroner (or central coroner if activated) and the MFDEA.
10. Request DMORTs to provide assistance to the medical examiner in the identification and preparation process. Additional DOD mortuary affairs personnel will be requested to provide assistance to the medical examiner, if required.
11. If required, request deployment of one or more DMORT teams. Federal ESF-8 will coordinate the request and logistics for the deployed teams.
12. Request the Disaster Portable Morgue Unit as needed.
13. Request portable morgue units from other states through the EMAC process as needed.
14. Use additional ambulances that have arrived through the EMAC to provide ground transportation to move patients from triage points or evacuated hospitals to the designated medical evacuation airhead.
15. Track resupply from routine supply sources. If those sources are insufficient or unable to provide needed supplies and pharmaceuticals in a timely fashion, federal ESF-8 will be contacted to either provide the needed supplies or assist the supply source, through the JFO, to move resources into the affected area.
16. Implement measures to assure food safety if necessary.

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17. Working with local public water providers, county environmental health departments, and public works departments, confirm the availability of potable water supplies to the general public as well as the healthcare infrastructure.
18. Provide enhanced water well testing for homes on private and community wells.
19. Plan and execute prioritization of the distribution of emergency potable water will be planned and executed in support of ESF-6 as needed.
20. Work with the local mass care and sheltering coordinator to provide shelter medical support.
21. If the local community and MDHSS are unable to provide appropriate medical coverage for shelters, request resources via federal ESF-8.
22. Coordinate movement of people who require additional medical support to Medical Shelters or hospitals.
23. Work with local public health authorities to re-establish public health services.

Missouri Department of Mental Health

1. Coordinate provision of psychological first aid, mental health crisis counseling, and substance abuse services for first responders and victims of the disaster.
2. Work with contracted mental health agencies to ensure that patients who require treatment in licensed facilities are moved if required. Methadone patients currently under treatment may have to be moved to other treatment programs.
3. MDMH-licensed methadone providers will provide access to needed medications to patients currently under treatment who may have to be moved to other treatment programs.
4. Develop a request for the FEMA Crisis Counseling Program which will be presented to the Federal Human Services Branch at the JFO. SAMHSA can be activated through the federal ESF-8 lead at the JFO.
5. Work with SAMHSA to provide public messaging and crisis counseling in an effort to calm citizens and reduce negative behaviors.
6. Coordinate access to mental health providers in support of stress management for first responders and survivors of the disaster.
7. Coordinate crises counseling services for victims and responders and provide a 24/7 mental health hotline number for the disaster based on the geographic location and scope of the disaster. The hotline will be coordinated with MDHSS for public health emergencies based on the nature and scope of the emergency.
8. Work with ESF-6 to coordinate requested mental health and substance abuse services at shelters as requested and available.

Missouri Department of Social Services

Coordinate reunion of separated families, assist with mass care facilities, and provide essential services to displaced persons.

Missouri Funeral Directors and Embalmers Association

Conduct mortuary services.

Federal Mission-essential Tasks

U.S. Department of Health and Human Services

1. After establishment of the JFO, submit requests through the FCO or operations section chief to the ESF-8 lead. The ESF-8 lead will be in close communication with the HHS Assistant Secretary for Preparedness and Response Emergency Management Group for approval and identification of the resources that will be provided. The federal ESF-8 lead will work directly with the state ESF-8 lead to ensure the State's needs are being met.
2. When federal ESF-8 resources have arrived, coordinate at the federal level through the ESF-8 lead at the JFO and the Operations Section Chief.
3. Deploy additional healthcare professionals from the federal ESF-8 resources to augment where required. The VA may also provide staffing and supplies.
4. Monitor blood and blood product shortages and reserves, including the safety and availability of the blood supply, and liaison with the American Association of Blood Banks Interorganizational Task Force on Domestic Disasters and Acts of Terrorism to assist in logistical requirements, and to coordinate a national public blood announcement message for the need to donate.
5. The U.S. Public Health Service (PHS) Commissioned Corps has health professionals who can be deployed to assist with a variety of public health needs. PHS teams can be deployed to assist with the sheltering and medical mission, support local public health departments, support mental health efforts, and assist with patient continuity and transition. These professionals are deployed through federal ESF-8.
6. FMSs may be deployed to treat non-acute medical, mental health, and other health-related needs that cannot be accommodated or provided for in a general shelter. Staffing for the FMS typically is accomplished through deployment of the PHS Commissioned Corps officers. The FMS is not an acute-care hospital or emergency room. Delivery is limited to days rather than weeks depending on air and ground access to the affected area. One FMS set requires a minimum of 40,000 square ft of climate controlled space with the following required features:
 - a. Adequate loading ramps, materiel handling equipment (MHE), and parking.
 - b. Wrap around services to include food and water, waste disposal, medical oxygen, laundry, mortuary services, etc.
 - c. Refrigeration and controlled substance storage.
 - d. Bathrooms and shower capability.
 - e. Billeting support for 150+ FMS staff.
 - f. Security.
7. DMORTs may be deployed to provide assistance to the medical examiner in the identification and preparation process. Additional DOD mortuary affairs personnel will be requested to provide assistance to the medical examiner, if required.
8. Assure the safety and security of food in coordination with other responsible federal agencies (e.g., USDA). In cooperation with state, tribal, and local officials, assesses whether food manufacturing, food processing, food distribution, food service, and food retail establishments in the affected area are able to provide safe and secure food.

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U.S. Department of Defense

1. Field hospitals may be required to temporarily replace existing hospital infrastructure that has been damaged. This requirement may be met by the deployment of National Guard or DOD field hospitals (Air Force or Air Guard Expeditionary Medical Support or Army or National Guard Combat Support Hospital).
2. Coordinate patient reception, tracking, and management to nearby NDMS hospitals, VA hospitals, and DOD military treatment facilities that are available and can provide appropriate care.
3. Provide available military medical personnel to assist ESF-8 in the protection of public health (such as food, water, wastewater, solid waste disposal, vectors, hygiene, and other environmental conditions).
4. Provide available veterinary military personnel to assist ESF-8 personnel in the medical treatment of animals.
5. Provide available DOD medical supplies for distribution to mass care centers and medical care locations being operated for incident victims with reimbursement to DOD.
6. Provide available emergency medical support to assist state, tribal, or local officials within the disaster area and the surrounding vicinity. Such services may include triage, medical treatment, mental health support, and the use of surviving DOD medical facilities within or near the incident area.
7. Provide assistance, as available, in managing human remains, including victim identification and mortuary affairs and temporary internment of the dead.
8. Provide evaluation and risk management support through use of Defense Coordinating Officers, Emergency Preparedness Liaison Officers, and Joint Regional Medical Planners.
9. Provide available blood products in coordination with USDHHS.
10. Provide medical surveillance and laboratory diagnostics and confirmatory testing in coordination with USDHHS.
11. USTRANSCOM will begin fixed-wing patient evacuation from the designated site to designated Federal Coordinating Centers, which will in turn transfer patients to the receiving hospitals for definitive care.
12. USTRANSOM and GPMRC will coordinate evacuation of patients from the patient CASs to the designated Federal Coordinating Center.
13. USTRANSCOM will provide MDHSS with patient tracking data for any patients evacuated into NDMS system.
14. USTRANSCOM will use its in-transit patient visibility system, TRACES2, track which patients go to which Federal Coordinating Center. Once patients arrive there, the Federal Coordinating Center will keep the NDMS system informed of the status of evacuated patients. Information on evacuated patients will be provided back to the State through ESF-8 at the JFO.
15. Via the U.S. Army Corps of Engineers (USACE) and through ESF-3 – Public Works and Engineering, provide technical assistance, equipment, and supplies as required in support of USDHHS to accomplish temporary restoration of damaged public utilities affecting public health and medical facilities and, in the event of a catastrophic mass fatality incident, assist in temporary internment of the dead.

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Federal Emergency Management Agency

Provide Total Asset Visibility through the use of global positioning system tracking services to enable visibility of ESF-8 resources through mapping capabilities and reports.

U.S. Department of Justice

1. Assist in victim identification, coordinated through the Federal Bureau of Investigation (FBI), and provide state, tribal, or local officials with legal advice concerning identification of the dead.
2. Establish an adult missing persons call center and assist in the disposition of cases.
3. Share missing persons data with ESF-8 and ESF-13 – Public Safety and Security in support of identification of the dead and seriously wounded.
4. Support local death scene investigations and evidence recovery.

U.S. Department of State

Coordinate with foreign states concerning offers of support, gifts, offerings, donations, or other aid. This includes establishing coordination with partner nations to identify the U.S.-validated immediate support in response to an incident.

U.S. Department of Veterans Affairs

Bury and memorialize eligible veterans and advise on methods for interment of the dead during national or homeland security emergencies.

United States Agency for International Development

Office of Foreign Disaster Assistance will assist in the tracking and distribution of international support assets.

American Red Cross

1. Provide available personnel to assist in temporary infirmaries, immunization clinics, morgues, hospitals, and nursing homes. Assistance consists of administrative support, logistical support, or health services support within clearly defined boundaries.
2. Acquaint families with available health resources and services, and make appropriate referrals.
3. At the request of USDHHS, coordinate with the American Association of Blood Banks Inter-organizational Task Force on Domestic Disasters and Acts of Terrorism to provide blood products and services as needed through regional blood centers.
4. Support reunification efforts through its “Safe and Well” website and in coordination with government entities as appropriate.
5. Provide supportive counseling for family members of the dead, for the injured, and for others affected by the incident.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Public Health Agencies

4.1.2 State

- Missouri Department of Health and Senior Services

4.1.3 Federal

- U.S. Department of Health and Human Services

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Emergency Management Departments
- Local Law Enforcement
- Local Mental Health Agencies
- Local Non-Governmental Organizations
- Local Public Works Agencies
- Local Social Services Agencies
- Missouri Funeral Directors and Embalmers Association (local members)

4.2.2 State

- Missouri Department of Agriculture
- Missouri Department of Conservation
- Missouri Department of Mental Health
- Missouri Department of Natural Resources
- Missouri Department of Social Services
- Missouri Department of Transportation
- Missouri Funeral Directors and Embalmers Association
- Missouri Hospital Association
- Missouri National Guard
- Missouri State Highway Patrol

4.2.3 Federal

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Energy/National Nuclear Security Administration
- U.S. Department of Homeland Security

- Federal Emergency Management Agency
- Office of Infrastructure Protection
- U.S. Department of the Interior
- U.S. Department of Justice
- U.S. Department of Labor
- U.S. Department of State
- U.S. Department of Transportation
- U.S. Department of Veterans Affairs
- U.S. Environmental Protection Agency
- General Services Administration
- U.S. Agency for International Development
- American Red Cross

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The EMAC offers state-to-state assistance during governor-declared state of emergency (receiving state). Assumedly, during a NMSZ incident, EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to utilize the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA’s mission assignment process. Both the federal and EMAC system are activated and managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

1. The Governor of Missouri declares a disaster.
2. SEMA opens an EMAC event in the EMAC Operations System.
3. Missouri requests assets based on mission assignment.
4. The assisting state communicates available assets and estimated costs to SEMA.
5. SEMA approves the resource and costs.
6. The resource from the assisting state mobilizes and deploys.

For resources not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136. Only the SEMA Director, Deputy Director or Operations Branch Chief may approve an EMAC or ARF request.

5.1 Pre-scripted Requests for EMAC Assistance

Table C8-6 details resources that may be requested through the EMAC system from non-impacted states through pre-incident agreements with Missouri. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

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Table C8-6 ESF-8 Pre-scripted EMAC Requests for Assistance

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	Assistant Field Team Leader	
	General environmental sanitation and vector control	
	Geographic Information System (GIS) assistance for Environmental Public Health Response Team (EPHRT) for general environmental sanitation	
	Monitoring of personnel leaving potentially radiological contaminated area	
	State Vital Records Management	
	Vector control activities	
	State New Born Screening Lab, System, and Team	
	State National Guard ROPU's (water treatment systems)	
	State DMAT	
	State DMORT	

5.2 Pre-scripted Requests for Federal Assistance

Table C8-7 details resources that may be requested from the Federal Government via FEMA Mission Assignments. Most resource requests (ARFs) are pre-developed to allow rapid processing during a NMSZ incident.

Table C8-7 ESF-8 Pre-scripted Action Request Forms

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	EMS Inspector II	MDHSS – Sit Room	M	Ambulance Strike Team/ T-1	P	3
	Site Commander	MDHSS – Sit Room	M	Chronic disease drugs	S	1
	Department Situation Room (DSR) Commander	MDHSS – Sit Room	M	Crush syndrome victims – supplies & equipment/dialysis	S	
	DSR Commander	MDHSS – Sit Room	M	Three National Disaster Med System DMATs	P	1
	DSR Commander	MDHSS – Sit Room	M		P	1
	DSR Commander	MDHSS – Sit Room	M	Mental Health Specialty	P	1
	DSR Commander	MDHSS – Sit Room	M		P	1
	DSR Commander	MDHSS – Sit Room	M	Four 250 bed Federal Medical Stations	S	1
	DSR Commander	MDHSS – Sit Room	H	Two Disaster Mortuary Operational Response Teams	P	
	DSR Commander	MDHSS – Sit Room	H	One Disaster Portable Morgue Unit	P	

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ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
		MDHSS – Sit Room	M	Portable Oxygen canisters/supplies	S	1, 3
	DSR Commander	MDHSS – Sit Room	M	Four Modular Emergency Medical Systems	S	1
	DSR Commander	MDHSS – Sit Room		One NDMS Incident Response Coordination Teams		1
	DSR Commander	MDHSS – Sit Room	M	Two Rapid Deployment Teams	P	1
	Site Commander	MDHSS – Sit Room	M	Vital Records Registrar & equipment	P S	
	Site Commander	MDHSS – Sit Room	H	Commercial chemical toilets	S	
	Site Commander	MDHSS – Sit Room	H	EPHRT/ T-2	P S	
	Site Commander	MDHSS – Sit Room	H	EPHRT/ T-3	P S	
	Site Commander	MDHSS – Sit Room	H	EPHRT/ T-5A	P S	
	Site Commander	MDHSS – Sit Room	H	Public Health Epidemiologist/ T-4	P S	
	Site Commander	MDHSS – Sit Room	H	Portal monitors, one staff person, dosimetry & radiological survey instruments	P S	
	Site Commander	MDHSS – Sit Room	H	Radiological monitoring personnel & equipment	P S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-2A	S	

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ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-2B	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-2C	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-2D	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-2E	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-2F	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-3A	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-3B	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-3C	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-3D	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-3E	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-3F	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-4A	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-4B	S	

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ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-4C	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-4D	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-4E	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-4F	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-5A	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-5B	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-5C	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-5D	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-5E	S	
	Site Commander	MDHSS – Sit Room	H	Portable toilets/ T-5F	S	
	Site Commander	MDHSS – Sit Room	H	Public Health Vector Control Inspectors/ T-3	P	
	Site Commander	MDHSS – Sit Room	H	FWD crew transport vehicle/ T-3	S	

6.0 Operational Tools

This Section provides resource calculations and other tools to support integrated earthquake planning and response.

6.1 Resource Calculations for Mission-essential Tasks

Table C8-8 lists raw demographic data.

Table C8-8 Raw Demographic Data

Raw Data			
Element	MAE Center	MDHSS	Notes
Counties Impacted	23	23	MAE Center Data
Impacted Population (number taken from 2009 projected census data, not consistent with MAE model)	2,288,445	2,288,445	2009 Census Projection
"At Risk" Population	842,002	842,002	MAE Center Data
Number of Persons Seeking Shelter	237,991	237,991	MAE Center Data
Percent Vulnerable Age	23	23	Average of All Counties
Percent Disabled	23	23	Average of All Counties
Injuries	13,434	92,719	Region C and E
Level 3 Injuries	10,177	70,240	Require Medical Aid
Level 2 Injuries	2,897	19,995	Require Hospital Care
Level 1 Injuries	360	2,485	Life-Threatening
Fatalities	686	4,735	Region C and E
Total Hospital Facilities	208	164	Source: MAE Center/MDHSS
Total Hospital Beds	27,343	22,031	Source: MAE Center/MDHSS
Hospitals Lost in Regions C and E	7	61	Source: MAE Center/MDHSS
Hospital Beds Lost in Regions C and E	846	10,715	Source: MAE Center/MDHSS

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Table C8-9 lists resource calculations for Mission-essential Task 1.

Table C8-9 Resource Calculations for Mission-essential Task 1

Mission-essential Task 1: Lead and Coordinate Emergency and Acute Care Operations			
Analysis 1: Hospital Bed Gap Analysis	MAE Center	MDHSS	Notes
Total Beds	27,343	22,031	Source: MAE Center/MDHSS
Beds Lost	846	13,495	Source: MAE Center/MDHSS
Remaining Beds	26,497	8,536	Source: MAE Center/MDHSS
Open Beds	6,624	2,134	Assumes 75% hospital capacity; Source: MAE Center/MDHSS
Beds Needed for Level 1 and 2	3,257	22,479	Per DHSS Data
Shortage of Beds	3,367	-20,345	
Conclusion: Bed space within Missouri is inadequate under the accepted assumptions. Critical care patients may require evacuation to nearest out-of-state hospitals. Beds lost include Regions C and E, outstate CAH staffed beds/swing beds, and psych staffed beds.			
Analysis 2: Medical Staging/Field Hospital Analysis			
Total Requiring Medical Support (Level 1, 2, and 3)	13,434	92,719	Source: MAE Center/MDHSS
State Capacity for "Field Treatment" (trailers)	8,620	7,020	Source: MAE Center/MDHSS
Staffing Needs to Support Trailers(Two 12 hour shifts)	1,231	1,003	Assumes patient to staff ratio of 14:1
Federal Needs	-4,814	-85,699	Capacity Gap for Treatment
DMAT Capacity (3 days)	750	750	250 patients/day for three days
DMATs Needed*	6	114	
Conclusion: *Assumes 250 patients treated/day for 3 days by each DMAT. Also assumes local/state staff is available to support operationalizing MCI/MS trailers. Requires evacuation of patients needing additional long-term medical support post-treatment each day.			

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Table C8-10 provides resource calculations for Mission-essential Task 2.

Table C8-10 Resource Calculations for Mission-essential Task 2

Mission-essential Task 2: Support Patient Evacuation/Movement			
Analysis 3: Level 1 Critical Care Evacuation	MAE Center	MDHSS	Notes
Total Requiring Immediate Evacuation	360	2,485	Level 1 Patients per DHSS
Number per Helicopter	2	1	Dependent on type of helicopter used
Operations/Day/Helicopter	12	10	Maximum
Total Helicopter Operations	15	248	
Pilots/Crew	60	994	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – 1 Day Operation	15	248	
Conclusion: Many helicopters are needed to support Level 3 evacuation. It is assumed that injured will be moved to a dozen or more medical collection and triage sites throughout the impact zone. Level 1 patients will require immediate evacuation to sustain life. Total reliance on rotary wing operations is unsustainable.			
Analysis 4: Level 2 Medical Evacuation	MAE Center	MDHSS	Notes
Level 2 Event Population Requiring Evacuation	2,897	19,995	Level 2 (assumes in-zone stabilization) per MAE Center
Impact Zone Hospital Population Requiring Evacuation	635	8,036	Patients in hospital during incident; assumes 75% hospital capacity.
Total Level 2 Population Requiring Evacuation	3,532	28,031	Level 2 Injured + People already in the hospital
Number per Helicopter	2	2	Dependent on type of helicopter used
Operations/Day/Helicopter	12	10	Maximum
Total Helicopter Operations	147	1,402	One day operation
Number of Helicopters Needed – Two-Day Operation	74	701	
Pilots/Crew	294	2,803	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – Three-Day Operation	49	467	
Pilots/Crew	196	1,869	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – Four-Day Operation	37	350	
Pilots/Crew	147	1,402	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – Five-Day Operation	29	280	

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Mission-essential Task 2: Support Patient Evacuation/Movement			
Pilots/Crew	118	1,121	1 pilot/1 crew member for 2 shifts
Conclusion: These calculations assume that Level 3 patients are treated and released and evacuated with general shelter populations. Based on the MDHSS data, between 280 and 701 helicopters are needed for Level 2 evacuation depending on the number of days of operation. Balancing treatment and care of Level 2 patients in the impact zone with evacuation is crucial to managing the overall ESF-8 operation as well as managing available air operations resources. The ability to treat and care for patients in the impact zone may also provide time necessary to operationalize ground transportation. Complete reliance on rotary wing operations is unsustainable.			
Analysis 5: Access and Functional Needs Evacuation	MAE Center	MDHSS	Notes
Approximate Number of People with Functional Needs	252,448	611,800	MDHSS Data: 23.375% of Regions C and E
Number per Helicopter	10	10	
Operations/Day/Helicopter	10	10	Maximum
Total Helicopter Operations	2,524	6,118	
Number of Helicopters Needed – Two-Day Operation	1,262	3,059	
Pilots/Crew	5,049	12,236	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – Three-Day Operation	841	2,039	
Pilots/Crew	3,366	8,157	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – Four-Day Operation	631	1,530	
Pilots/Crew	2,524	6,118	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – Five-Day Operation	505	1,224	
Pilots/Crew	2,020	4,894	1 pilot/1 crew member for 2 shifts
Number of Helicopters Needed – Ten-Day Operation	252	612	
Pilots/Crew	1,010	2,447	1 pilot/1 crew member for 2 shifts
Conclusion: Significant rotary operations are required to support evacuation of those with access and functional needs. Evacuation must be augmented by ground transportation once roads are opened or modified to support use.			

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Table C8-11 provides resource calculations for Mission-essential Task 3.

Table C8-11 Resource Calculations for Mission-essential Task 3

Mission-essential Task 3: Coordinate Medical Support for those with Access and Functional Needs			
Analysis 6: Medical Capacity for Access and Functional Needs	MAE Center	MDHSS	Notes
Approximate Number of People with Disabilities	55,630	611,800	23.375% of "At Risk" and Shelter Seeking Population
Staffing for Mass Care of those with Functional Needs	3,974	87,400	Assumes patient to staff ratio of 14:1
Shelters Needed: 100 per Shelter	556	6,118	
Staffing per Shelter	14	14	
Shelters Needed: 200 per Shelter	278	3,059	
Staffing per Shelter	29	29	
Shelters Needed: 250 per Shelter	223	2,447	
Staffing per Shelter	36	36	
Shelters Needed: 500 per Shelter	111	1,224	
Staffing per Shelter	71	71	
Conclusion: Significant medical support needs exist for those with access and functional needs. The approximate number of people with access and functional needs is based on the percentage of disabled in Regions C and E. Persons with access, functional, and non-acute medical needs will be sheltered at Congregate Care Shelters (with the general population) with medication support via the SNS Managed Inventory and other resources as available.			

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Table C8-12 provides resource calculations for Mission-essential Task 4.

Table C8-12 Resource Calculations for Mission-essential Task 4

Mission-essential Task 4: Coordinate Medical Support for Chronic Illnesses at Congregate Care Shelters			
Analysis 7: Medical Capacity for Chronic Illnesses	MAE Center	MDHSS	Notes
Approximate Number of People with Medical Needs	140,891	246,235	Breakdown of conditions provided below.
Cancers	7,854	1,399	Medication needs can be assessed using these numbers. SNS Managed Inventory can be requested to support medication needs to support chronic treatment needs at General Population Shelters.
Diabetes	9,520	11,121	
Heart Disease	19,515	81,702	
Hypertension	33,795	13,460	
Stroke	2,380	5,363	
Mental Disorders	24,751	67,245	
Pulmonary Conditions	43,076	65,945	
Staffing for Mass Care of those with Medical Needs	20,127	35,176	
Shelters Needed: 500 per Shelter	282	492	
Conclusion: It is assumed that a majority of these individuals can be supported at General Population Shelters if medications are provided via the SNS Managed Inventory or other sources. People requiring additional care can be placed in an Acute Medical Care Shelter or hospital.			

Table C8-13 provides resource calculations for Mission-essential Task 5.

Table C8-13 Resource Calculations for Mission-essential Task 5

Mission-essential Task 5: Lead and Coordinate Mass Fatality Operations			
Analysis 8: Capacity for Mass Fatality Operations	MAE Center	MDHSS	Notes
Number of Fatalities	686	4,735	Source: MAE Center/MDHSS
Victims/Refrigerated Unit	25	25	
Number of Refrigerated Unit	27	189	
Victims/Mobile Morgue/Day	12	12	Based on prior experience (Hurricane Katrina, Oklahoma City)
Approximate Days of Operation	57	395	
Staff	500	500	
Conclusion: At least one DMORT and a mobile morgue are needed.			

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Table C8-14 summarizes Mission-essential Task calculations.

Table C8-14 Summary of Mission-essential Task Calculations

Summary – Mission-essential Task Calculations	MAE Center	MDHSS	Notes
Total Staff-Medical Staging/Field Hospitals and Shelters:	25,332	123,579	Local and State only; does not include DMAT
Total Staff-Evacuation Low End Calculations:	1,188	4,562	Longer duration evacuation operations
Total Staff-Evacuation High End Calculations:	5,403	16,033	Shorter duration evacuation operations
Total Staff-Mass Fatality Operations:	500	500	
Total Estimated Staffing Needs – Low End	27,020	128,642	Longer duration evacuation operations
Total Estimated Staffing Needs – High End	31,236	140,112	Shorter duration evacuation operations

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6.2 NMSZ Incident Patient and Resource Projections

Table C8-15 lists frequently occurring injuries.

Table C8-15 Frequently Occurring Injuries

Injury Type	%	MAE Center Data	MDHSS Data
extremities	65.6	8,813	60,824
spinal	9.0	1,209	8,345
chest	7.0	940	6,490
abdominal	7.1	954	6,583
cranial	6.8	914	6,305
pelvic	4.5	605	4,172

Table C8-16 shows patient presentation distribution.

Table C8-16 Patient Presentation Distribution

Hour	Percentage of Patients Arriving	MAE Center Data	MDHSS Data
0-1	5	672	4,636
1-2	10	1,343	9,272
2-3	21	2,821	19,471
3-4	14	1,881	12,981
4-5	7	940	6,490
5-6	6	806	5,563
6-7	10	1,343	9,272
7-8	4	537	3,709
8-9	3	403	2,782
9-14	12.5	1,679	11,590
14-19	7.5	1,008	6,954
Total	100%	13,434	92,719

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Table C8-17 lists supply and equipment projections.

Table C8-17 Supply and Equipment Projections

Hour	MAE Center Data		MDHSS Data	
	Ventilators-Adult	Ventilators - Pediatric	Ventilators-Adult	Ventilators – Pediatric
0-12	713	0	4,919	0
13-24	2,654	0	18,317	0
25-36	2,498	0	17,241	0
37-48	658	7	4,538	46
49-60	308	7	2,127	46
61-72	304	7	2,096	46
73-84	304	7	2,096	46
85-96	304	7	2,096	46
97-108	142	7	979	46
109-120	94	7	649	46
121-132	94	0	649	0
133-144	80	0	551	0
145-156	27	0	185	0
157-168	1	0	10	0
169-180	0	0	0	0
Supply/Equipment		Amount Required – MAE Center	Amount Required - MDHSS	
Dialysis Machines		579	3,997	
Units of Blood		10,614	73,258	

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Table C8-18 lists bed requirements (MAE Center data).

Table C8-18 Bed Requirements per 12-Hour Interval for a NMSZ Earthquake – MAE Center Data

Hour	Emergency Room	Operating Room	Intensive Care Unit	Medical/Surgical	Minimal Care	Pediatric Intensive Care Unit	Pediatric Intensive Care Ward	Morgue
0-12	7,563	3,109	1,672	3,367	311	45	403	0
13-24	2,910	3,110	4,536	6,947	500	83	593	0
25-36	198	644	4,827	7,894	511	283	686	25
37-48	0	0	4,201	7,985	1,681	389	756	36
49-60	0	0	3,706	6,686	1,999	396	757	103
61-72	0	0	1,061	6,641	2,001	389	611	119
73-84	0	0	338	6,050	881	383	524	121
85-96	0	0	271	4,690	437	359	238	123
97-108	0	0	257	4,082	1,664	332	190	123
109-120	0	0	257	2,351	1,688	325	50	31
121-132	0	0	119	1,961	1,629	325	29	1
133-144	0	0	78	1,950	1,206	325	221	0
145-156	0	0	78	759	1,619	125	317	0
157-168	0	0	68	231	1,625	12	326	0
169-180	0	0	26	252	463	0	325	0
181-192	0	0	5	257	11	0	325	0
193-204	0	0	0	257	24	0	325	0
205-216	0	0	0	233	71	0	325	0
217-228	0	0	0	186	116	0	325	0
229-240	0	0	0	132	114	0	292	0
241-252	0	0	0	83	104	0	257	0
253-264	0	0	0	78	54	0	50	0
265-276	0	0	0	78	5	0	0	0
277-288	0	0	0	78	0	0	0	0
289-300	0	0	0	78	0	0	0	0
301-312	0	0	0	78	44	0	0	0
313-324	0	0	0	34	54	0	0	0
325-336	0	0	0	24	55	0	0	0
337-348	0	0	0	16	11	0	0	0

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Table C8-19 lists bed requirements (MDHSS data).

Table C8-19 Bed Requirements per 12-Hour Interval for a NMSZ Earthquake – MDHSS Data

Hour	Emergency Room	Operating Room	Intensive Care Unit	Medical/Surgical	Minimal Care	Pediatric Intensive Care Unit	Pediatric Intensive Care Ward	Morgue
0-12	51,933	21,347	11,479	23,118	2,132	309	2,766	0
13-24	19,982	21,357	31,147	47,699	3,435	567	4,069	0
25-36	1,360	4,424	33,145	54,204	3,507	1,942	4,707	173
37-48	0	0	28,845	54,832	11,541	2,668	5,191	253
49-60	0	0	25,446	45,907	13,725	2,719	5,196	713
61-72	0	0	7,282	45,598	13,740	2,673	4,197	828
73-84	0	0	2,323	41,540	6,051	2,632	3,600	840
85-96	0	0	1,859	32,203	2,997	2,462	1,633	852
97-108	0	0	1,761	28,031	11,428	2,276	1,303	852
109-120	0	0	1,761	16,140	11,588	2,230	345	215
121-132	0	0	814	13,462	11,186	2,230	196	4
133-144	0	0	536	13,390	8,281	2,230	1,519	0
145-156	0	0	536	5,212	11,114	860	2,178	0
157-168	0	0	469	1,586	11,155	82	2,240	0
169-180	0	0	175	1,730	3,178	0	2,230	0
181-192	0	0	31	1,761	77	0	2,230	0
193-204	0	0	0	1,761	165	0	2,230	0
205-216	0	0	0	1,597	484	0	2,230	0
217-228	0	0	0	1,277	793	0	2,230	0
229-240	0	0	0	906	783	0	2,003	0
241-252	0	0	0	567	711	0	1,766	0
253-264	0	0	0	536	371	0	345	0
265-276	0	0	0	536	31	0	0	0
277-288	0	0	0	536	0	0	0	0
289-300	0	0	0	536	0	0	0	0
301-312	0	0	0	536	304	0	0	0
313-324	0	0	0	232	371	0	0	0
325-336	0	0	0	165	376	0	0	0
337-348	0	0	0	108	72	0	0	0

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Table C8-20 lists projected mortality rates.

Table C8-20 Projected Mortality Rates for Specific Patient Conditions

Patient Condition Description	Mortality Rate
Lower extremity crush, multiple sites of lower limb	35%
Lower extremity crush, hip and thigh	35%
Crushing injury of upper limb	35%
Crushing injury of upper limb, fracture of tibia/fibula upper end, closed	35%
Concussion with no loss of consciousness, multiple and unspecified intrathoracic organs, without mention of open wound into cavity (crushed chest multiple intrathoracic organs)	35.00%
Crushing injury of multiple and unspecified sites	35.00%
Crushing injury of neck	35.00%
Injury to heart, without mention of open wound into thorax	17.50%
Injury to heart and lung (cardiac or myocardial contusion)	17.50%
Injury to heart and lung (cardiac or myocardial contusion) (pediatric)	17.50%
Diaphragm, with open wound into cavity	17.50%
Other specified intrathoracic organs, with open wound into cavity	17.50%
Multiple and unspecified intrathoracic organs, without mention of open wound into cavity (crushed chest multiple intrathoracic organs)	17.50%
Multiple and unspecified intrathoracic organs, with open wound into cavity	17.50%
Pediatric multiple and unspecified intrathoracic organs, with open wound into cavity	17.50%
Injury to gastro-intestinal (GI) tract, stomach, without mention of open wound into cavity	17.50%
Injury to GI tract stomach, with open wound into cavity	17.50%
Injury to GI tract small intestine, without mention of open wound into cavity	17.50%
Injury to GI tract small intestine, with open wound into cavity	17.50%
Injury to GI tract small intestine, with open wound into cavity (pediatric)	17.50%
Injury to GI tract other and unspecified gastrointestinal sites, without mention of open wound into cavity	17.50%
Injury to GI tract other and unspecified gastrointestinal sites, with open wound into cavity	17.50%
Small intestine, without mention of open wound into cavity, fracture of radius and ulna unspecified part, closed	17.50%
Small intestine, without mention of open wound into cavity, fracture of radius and ulna unspecified part, closed (pediatric)	17.50%
Stomach, without mention of open wound into cavity, unspecified pelvic organ, without mention of open wound into cavity	17.50%
Other and unspecified gastrointestinal sites, with open wound into cavity, multiple and unspecified intrathoracic organs, with open wound into cavity	17.50%
Injury to liver without mention of open wound into cavity	17.50%
Pediatric injury to liver without mention of open wound into cavity	17.50%
Injury to liver with open wound into cavity	17.50%
Internal injury to thorax, abdomen, and pelvis ureter, without mention of open wound into cavity	17.50%
Internal injury to thorax, abdomen, and pelvis unspecified pelvic organ, without mention of open wound into cavity	17.50%
Internal injury to thorax, abdomen, and pelvis unspecified pelvic organ, with open wound into cavity	17.50%
Acute myocardial infarction	9.00%
Extreme immaturity	9.00%

6.3 Staff Resource Projections

Table C8-21 lists projected staff resource requirements (MAE Center data).

Table C8-21 Projected Staff Resource Requirements per 12-Hour Interval – MAE Center Data

Hour	Emergency Specialist	Emergency Room Nurse	Intensivist	Internal Medicine	Pediatric Ward Nurse	Pediatrician	Pediatric Intensive Care Unit Nurse	Radiologist	General Surgeon	Orthopedic Surgeon	Neurosurgeon	Anesthesiologist	Cardiothoracic Surgeon	Intensive Care Unit Nurse	Ward Nurse	Radiographer	Operating Room Nurse	Recovery Room Nurse	Lab Tech	Dialysis Nurse	Total
0-12	1,734	2,220	413	178	362	78	36	680	279	751	189	487	121	855	3,020	525	383	378	451	0	13,138
13-24	224	309	566	134	375	40	60	396	137	746	157	598	160	3,645	3,073	355	702	425	133	0	12,235
25-36	0	0	290	54	449	68	237	308	149	308	107	107	45	3,356	3,591	227	164	99	250	572	10,379
37-48	0	0	475	75	481	47	273	221	83	293	70	132	40	2,693	3,694	276	0	0	110	117	9,081
49-60	0	0	78	54	345	64	237	269	128	298	56	74	23	2,592	3,608	149	0	0	222	572	8,769
61-72	0	0	50	26	406	46	274	128	66	132	40	26	23	508	3,597	256	0	0	160	579	6,316
73-84	0	0	16	6	93	21	237	157	27	237	29	59	18	269	2,332	121	0	0	103	287	4,011
85-96	0	0	50	0	115	43	268	79	28	102	24	25	22	210	2,224	151	0	0	96	463	3,899
97-108	0	0	16	0	34	12	214	113	28	153	4	44	18	263	1,587	108	0	0	103	287	2,984
109-120	0	0	22	0	13	39	244	34	20	38	2	23	7	93	1,410	82	0	0	96	463	2,588
121-132	0	0	5	0	14	10	214	110	28	149	1	43	16	87	1,343	104	0	0	99	288	2,513
133-144	0	0	22	0	136	52	244	35	19	37	1	27	5	22	1,098	78	0	0	93	465	2,335
145-156	0	0	5	0	178	21	66	16	6	4	0	16	1	27	504	32	0	0	30	81	987
157-168	0	0	5	0	123	34	0	22	16	0	0	20	2	7	131	10	0	0	10	2	381
169-180	0	0	2	0	169	18	0	15	4	0	0	15	1	0	122	22	0	0	22	12	403
181-192	0	0	0	0	123	34	0	21	13	0	0	19	2	0	133	9	0	0	9	2	365
193-204	0	0	0	0	169	18	0	14	4	0	0	14	1	0	123	21	0	0	21	12	398
205-216	0	0	0	0	123	34	0	20	10	0	0	19	2	0	90	9	0	0	9	2	319
217-228	0	0	0	0	169	18	0	14	4	0	0	14	1	0	75	20	0	0	20	0	337
229-240	0	0	0	0	119	33	0	19	10	0	0	18	2	0	67	9	0	0	9	0	286

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Hour	Emergency Specialist	Emergency Room Nurse	Intensivist	Internal Medicine	Pediatric Ward Nurse	Pediatrician	Pediatric Intensive Care Unit Nurse	Radiologist	General Surgeon	Orthopedic Surgeon	Neurosurgeon	Anesthesiologist	Cardiothoracic Surgeon	Intensive Care Unit Nurse	Ward Nurse	Radiographer	Operating Room Nurse	Recovery Room Nurse	Lab Tech	Dialysis Nurse	Total
241-252	0	0	0	0	167	18	0	11	4	0	0	11	1	0	24	18	0	0	18	0	272
253-264	0	0	0	0	35	5	0	11	10	0	0	4	1	0	46	9	0	0	9	0	131
265-276	0	0	0	0	0	0	0	4	4	0	0	0	1	0	24	2	0	0	2	0	37
277-288	0	0	0	0	0	0	0	7	10	0	0	0	1	0	46	7	0	0	7	0	81
289-300	0	0	0	0	0	0	0	4	4	0	0	0	1	0	24	2	0	0	2	0	37
301-312	0	0	0	0	0	0	0	7	10	0	0	0	1	0	49	7	0	0	7	0	83
313-324	0	0	0	0	0	0	0	3	4	0	0	0	0	0	18	2	0	0	2	0	29
325-336	0	0	0	0	0	0	0	1	1	0	0	0	0	0	18	3	0	0	3	0	27
337-348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	2

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Table C8-22 lists projected staff resource requirements (MDHSS data).

Table C8-22 Projected Staff Resource Requirements per 12-Hour Interval – MDHSS Data

Hour	Emergency Specialist	Emergency Room Nurse	Intensivist	Internal Medicine	Pediatric Ward Nurse	Pediatrician	Pediatric Intensive Care Unit Nurse	Radiologist	General Surgeon	Orthopedic Surgeon	Neurosurgeon	Anesthesiologist	Cardiothoracic Surgeon	Intensive Care Unit Nurse	Ward Nurse	Radiographer	Operating Room Nurse	Recovery Room Nurse	Lab Tech	Dialysis Nurse	Total
0-12	11,971	15,319	2,849	1,226	2,498	536	247	4,693	1,926	5,182	1,303	3,358	834	5,903	20,841	3,626	2,642	2,612	3,111	0	90,679
13-24	1,545	2,133	3,905	927	2,586	278	412	2,730	943	5,151	1,087	4,126	1,107	25,158	21,212	2,447	4,847	2,936	917	0	84,446
25-36	0	0	1,999	371	3,096	469	1,633	2,127	1,030	2,127	737	737	309	23,159	24,782	1,566	1,133	685	1,726	3,951	71,636
37-48	0	0	3,276	520	3,317	325	1,885	1,525	572	2,024	484	912	278	18,585	25,493	1,906	0	0	762	809	62,673
49-60	0	0	541	371	2,380	443	1,638	1,854	886	2,055	386	510	160	17,890	24,900	1,030	0	0	1,530	3,951	60,525
61-72	0	0	345	180	2,802	319	1,890	881	458	912	273	180	160	3,503	24,823	1,767	0	0	1,102	3,997	43,593
73-84	0	0	113	41	639	144	1,638	1,082	185	1,633	201	407	124	1,854	16,097	834	0	0	711	1,978	27,682
85-96	0	0	345	0	793	294	1,849	546	191	701	165	175	149	1,453	15,350	1,041	0	0	664	3,194	26,909
97-108	0	0	113	0	237	82	1,478	778	191	1,056	31	304	124	1,813	10,951	747	0	0	711	1,978	20,594
109-120	0	0	155	0	93	268	1,684	237	139	263	15	160	52	644	9,730	567	0	0	664	3,194	17,864
121-132	0	0	36	0	98	72	1,478	757	191	1,025	10	299	113	603	9,272	716	0	0	685	1,988	17,344
133-144	0	0	155	0	937	361	1,684	242	134	252	10	185	36	155	7,577	541	0	0	639	3,209	16,118
145-156	0	0	36	0	1,226	144	453	113	41	31	0	113	5	185	3,477	221	0	0	206	556	6,810
157-168	0	0	36	0	850	232	0	149	108	0	0	139	15	46	901	67	0	0	67	15	2,627
169-180	0	0	15	0	1,169	124	0	103	31	0	0	103	5	0	845	155	0	0	149	82	2,782
181-192	0	0	0	0	850	232	0	144	88	0	0	134	15	0	917	62	0	0	62	15	2,519
193-204	0	0	0	0	1,169	124	0	98	31	0	0	98	5	0	850	144	0	0	144	82	2,746
205-216	0	0	0	0	850	232	0	139	72	0	0	134	15	0	618	62	0	0	62	15	2,200
217-228	0	0	0	0	1,169	124	0	98	31	0	0	98	5	0	520	139	0	0	139	0	2,323
229-240	0	0	0	0	819	227	0	129	72	0	0	124	15	0	464	62	0	0	62	0	1,973
241-252	0	0	0	0	1,154	124	0	77	31	0	0	77	5	0	165	124	0	0	124	0	1,880

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Hour	Emergency Specialist	Emergency Room Nurse	Intensivist	Internal Medicine	Pediatric Ward Nurse	Pediatrician	Pediatric Intensive Care Unit Nurse	Radiologist	General Surgeon	Orthopedic Surgeon	Neurosurgeon	Anesthesiologist	Cardiothoracic Surgeon	Intensive Care Unit Nurse	Ward Nurse	Radiographer	Operating Room Nurse	Recovery Room Nurse	Lab Tech	Dialysis Nurse	Total
253-264	0	0	0	0	242	36	0	77	72	0	0	26	10	0	319	62	0	0	62	0	907
265-276	0	0	0	0	0	0	0	26	31	0	0	0	5	0	165	15	0	0	15	0	258
277-288	0	0	0	0	0	0	0	52	72	0	0	0	10	0	319	52	0	0	52	0	556
289-300	0	0	0	0	0	0	0	26	31	0	0	0	5	0	165	15	0	0	15	0	258
301-312	0	0	0	0	0	0	0	52	72	0	0	0	10	0	335	52	0	0	52	0	572
313-324	0	0	0	0	0	0	0	21	26	0	0	0	0	0	124	15	0	0	15	0	201
325-336	0	0	0	0	0	0	0	10	10	0	0	0	0	0	124	21	0	0	21	0	185
337-348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	5	0	15

6.4 Statements of Work and Sub-Taskings for ESF-8 Earthquake Response

The USDHHS is the lead federal agency for ESF-8 (Public Health and Medical Services) which confers upon USDHHS coordination responsibilities during earthquake response. Because of the nature of the USDHHS mission and its lead role in the public health and medical response during most major disasters, a number of federal agencies and departments will support ESF-8 mission assignments related to earthquake response. The following is a listing of the ESF-8 mission assignments and sub-taskings most likely to be activated during an earthquake response.

6.4.1 ESF-8 Pre-Scripted Statements of Work (PSSW)

1. Provide Public Health and Medical Staffing Support
 - a. Provide public health and medical staffing to support disaster response operations as directed by FEMA in the State of _____ affected by _____. This staffing may include, but is not limited to, physicians, mid-level practitioners, nurses, pharmacists, behavioral health specialists, veterinarians and the required administrative support staff. All activities will be coordinated with the appropriate state and local officials, as well as other federal agencies. All personnel requirements must be coordinated with and authorized by FEMA in conjunction with ESF-8 and the affected state(s). Specific tasks under this mission assignment will be requested by Mission Assignment Task Orders.
2. Provide medical supplies, pharmaceuticals, vaccines and equipment.
 - a. Provide medical supplies, pharmaceuticals, vaccines and equipment as directed by FEMA to support disaster response operations in the State of _____ affected by _____. All activities will be coordinated with the appropriate state and local officials, as well as other federal agencies. All medical supply, pharmaceutical, vaccine, and equipment requirements must be coordinated with and authorized by FEMA in conjunction with ESF-8 and the affected state. Specific tasks under this mission assignment will be requested by Mission Assignment Task Orders. All property purchases must be coordinated with FEMA Operations and Logistics, and a copy of the invoice or receiving report for purchased property provided to the Accountable Property Officer for FEMA within 30 days of receipt of the property. All accountable property purchased under this mission assignment must be returned to FEMA to be eligible for reimbursement.
3. Provide pharmaceuticals and medical equipment.
 - a. All activities will be coordinated with the appropriate state and local officials, as well as other federal agencies. All pharmaceutical and medical equipment requirements must be coordinated with and authorized by FEMA in conjunction with ESF-8 and the affected state.
 - b. Specific tasks under this mission assignment will be requested by Mission Assignment Task Orders. All property purchases must be coordinated with FEMA Operations and Logistics, and a copy of the invoice or receiving report for purchased property provided to the Accountable Property Officer for FEMA within 30 days of receipt of the property. All accountable property purchased under this mission assignment must be returned to FEMA to be eligible for reimbursement.

6.4.2 USDHHS Sub-Taskings

The three USDHHS PSSWs are further divided and delegated to the DOD, DHS, and USDHHS's Office of the Surgeon General.

U.S. Department of Defense (DOD)

1. Deploy available personnel to provide technical assistance and/or medical support, including home health care, to workers in the highest priority federal health care critical infrastructure/key resources (CI/KR) that must be maintained to protect the integrity and continuity of the nation.
2. Deploy available personnel to provide augmentation support for hospitals and PODS.
3. Deploy available public health and medical personnel to support highest priority federal health care CI/KR.

U.S. Department of Homeland Security (DHS)

1. Deploy and track available DHS mass fatality response assets.
2. Deploy available personnel to provide technical assistance and/or medical support, including home health care, to workers in the highest priority CI/KR that must be maintained to protect the integrity and continuity of the nation.
3. Deploy available personnel to provide augmentation support for hospitals and PODS.
4. Deploy available public health and medical personnel to support highest priority declared critical federal health care infrastructure areas.

USDHHS Office of the Surgeon General

1. Deploy available PHS Commission Corps to staff the EMG and Incident Response Coordination Teams.
2. Deploy available PHS Commission Corps to staff ESF-8 positions in the JFO and the National Response Coordination Center (NRCC).
3. Deploy available Rapid Assessment Team to determine epidemiological situation and assess local capabilities and resources.
4. Deploy available Rapid Response Public Health and Medical (Tier I, II, and Tier III) assets to support containment efforts.
5. Deploy available PHS Commission Corps to support exit screening at airports and other major transit hubs in affected countries.
6. Deploy available PHS Commission Corps to support highest priority declared critical federal health care infrastructure areas.
7. Deploy available Tier I Rapid Deployment Forces assets to provide staffing for FMS.
8. Deploy available PHS Commission Corps to provide technical assistance and/or medical support, including home health care, to workers in the highest priority federal health care CI/KR that must be maintained to protect the integrity and continuity of the nation.
9. Deploy available PHS Commission Corps to provide augmentation support for hospitals and PODS.

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USDHHS Centers for Disease Control and Prevention (CDC)

1. Deploy Rapid Assessment Team to determine epidemiological situation and assess local capabilities and resources.
2. Deploy Rapid Response Public Health and Medical assets to support containment efforts.
3. Deploy FMS caches.
4. Deploy medical material and pharmaceuticals from SNS.

USDHHS Substance Abuse & Mental Health Services Administration

Provide psychosocial support to responders and affected communities through institutionalization of psychosocial support services and development of workforce resiliency program.

Federal Emergency Management Agency (FEMA)

1. Provide [Base/Location Name] as a FEMA Distribution Center to support forward distribution of supplies / equipment to affected area. Provide billeting (barracks facilities are acceptable) and life support, to include meals and hygiene facilities, for [Number] personnel; marshalling area for up to [Number] trucks and trailers; [Number] sq. feet of covered storage; office and desks space for [Number] personnel; and material handling equipment/lift capability to offload (type of supplies/equipment) from (type vehicles/aircraft).
2. Provide (base name) as an Operational Staging Area to support forward distribution of supplies / equipment to affected area. Provide marshalling area for up to [Number] trucks and trailers; [Number] sq. feet of covered storage; and MHE/lift capability to offload [type of supplies/equipment] from [type vehicles/aircraft].
3. Provide capability to conduct retail fuel distribution operations at [Number] different points. Each point must provide the capacity to issue [Number] gallons of diesel fuel and/or [Number] gallons of unleaded gasoline. Fuel points must have appropriate nozzles to provide retail re-supply to first responders and commercial ground vehicles. Points must be operational [date/time] at [Location Name].
4. Provide all non-medical logistic and base operating support for deployed medical personnel and support personnel to include food, shelter, fuel, ground transportation, and line item re-supply for (location) from (Start Date) to (End Date).
5. Provide site preparations if required for deployed FMS at (location). Each site will be cleared and leveled to allow construction of the FMS.

U.S. Department of Transportation (DOT)

DOT will provide on-demand transportation to support federal teams and resources as directed by FEMA Region [Number] for [Name]. Any tasks will include duration and cost estimate and points of contact and will be on a FEMA task order form.

U.S. Department of Justice (DOJ)

Provide 24-hour security in support of FMSs and medical base operating camps at (location) from (Start date) to (End Date).

U.S. Department of Labor

Request monitoring of occupational health effects to ensure the safety of federal responders providing are or otherwise rendering assistance at (Location) from (Start Date) to (End Date).

U.S. Department of Veterans Affairs

1. Request VA staff and operate a FMS level, to include the following quantities and types of medical personnel: (X#) of (specify types of physicians), (X#) of (specify types of registered nurses), (X#) of LPNs, and (X#) of (specify types of other ancillary or support personnel) to support patient care at [Location Name] from (Start date) to End Date). Request that VA identify available personnel within 24 hours, and coordinate transportation so ensure that these personnel arrive at [Location Name] within 48 hours.
2. Request VA to provide assistance in interment of (X#) of human remains.

Deploy available personnel to provide technical assistance and/or medical support, including home health care, to workers in the highest priority CI/KR that must be maintained to protect the integrity and continuity of the nation.

6.5 Allocation of NDMS Assets during Earthquake Response

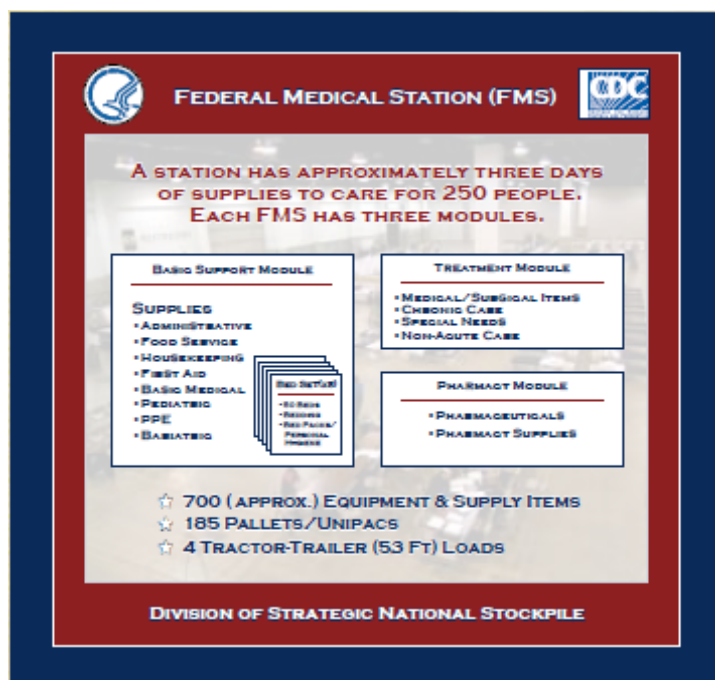
6.5.1 Discussion Points

- The NDMS bed-tracking function is a partnership among USDHHS, DOD, VA, and DHS. NDMS was created to increase access to inpatient medical care for returning wounded military, as well as serve the nation in the aftermath of a domestic disaster.
- NDMS includes a response component of ASPR, comprised of over 7,000 private-sector medical, mortuary, veterinary, and support personnel who are full-time intermittent federal employees. Many of the medical teams are affiliated with Schools of Medicine, and a large percentage of the physicians have academic appointments.
 - 50 DMATs
 - 3 International Medical Surgical Response Teams – also respond to domestic incidents
 - Mental Health Teams (PHS/NDMS)
 - 5 National Veterinary Response Teams
 - 10 DMORTs
 - 1 Weapons of Mass Destruction (WMD) DMORT
 - 1 Family Assistance Coordination Team
 - 3 Incident Response Coordination Teams
- The Public Health Bioterrorism and Public Health Emergencies Act of 2002 (Public Law 107-188) authorized NDMS in law and provided intermittent appointments for team members; Federal Tort Claims Act protection (liability); federal licensure; and protection under the Uniformed Services Employment and Reemployment Rights Act.
- NDMS activities/functions/responsibilities include:
 - Assessment of emergency medical needs.
 - On-scene care for acute, chronic, and mental health services.
 - Victim identification/mortuary services.
 - Veterinary medical services.

- Triage, austere medical care, casualty clearing/staging, and patient reception at local NDMS reception areas.
- Medical evacuation of casualties to NDMS-affiliated private-sector hospitals through DOD and VA partners.
- The 25 Level 1 DMATs can be launched in 4-6 hours, and, depending on the distance and surviving transportation infrastructure, can be operational as soon as 12 hours following activation.
- NDMS Teams in the immediate vicinity of an earthquake will be assumed non-operational because the personnel may be casualties, or serving their community through their full-time jobs as healthcare professionals. However, earthquakes can spare wide regions, and one or more local DMATs can be fully operational within hours of the incident.

6.5.2 Federal Medical Station

A Federal Medical Station (FMS) is a USDHHS/ASPR deployable asset. In addition to deploying other countermeasures, DSNS is responsible for deployment of FMSs when directed by HHS. DHHS/OPEO and CDC/DSNS are developing this federal medical capability for deployment to meet public health needs during a national emergency. This can operate with a federal staff, or be handed off to a state or local entity for operation. Each FMS provides a non-acute and special needs care or quarantine support capability anywhere in the United States. It is flexible, modular, scalable, and designed for installation in buildings of opportunity. A prime benefit is its ability to augment local health care infrastructure in mass casualty incidents or potential public health threats.



Deployment of a FMS will be directed by USDHHS/OPEO at the request of state officials. The FMS concept of operations is being developed to provide a total capability – materiel, staff, and support enablers. When fully operational, a FMS is designed to support 250 patients for 3 days. It may also be deployed in 50-bed increments or augmented with additional beds. Although a FMS can deploy with a federal clinical staff, it is not a standalone capability. State, local, or federal host officials must identify suitable buildings or structures to house a FMS and plan to provide support staff and necessary support services.

FMS characteristics are as follows:

- Quickly turns a building of opportunity into a temporary medical shelter.
- Accompanied by DSNS/FMS logistical team for setup support.
- Stocked with beds, supplies, and medicine to care for 250 non-acute and special needs patients for up to 3 days.

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- Modular configuration.
- Scalable to the incident from 50 to 250 beds.
- Modeled for all age populations.
- Transportable by air or ground for rapid, maximum geographic distribution.

One FMS set requires approximately 40,000 square feet of enclosed, climate-controlled space with the following required features:

- Adequate loading ramps, materiel handling equipment, and parking.
- Sufficient existing communications/information technology (IT) support and power supply (with back-up).
- Support services including food and water, waste disposal, medical oxygen, laundry, mortuary services, etc.
- Refrigeration and controlled substance storage.
- Bathrooms and shower capability.
- Billeting support for 100+ FMS staff Security.

6.5.3 Office of Force Readiness and Deployment, Office of the Surgeon General

Applied Public Health Teams (APHT) – APHTs provide resources and assistance to local health authorities throughout the United States. They were created in 2006 as part of the National Response Plan’s (NRP) ESF-8 public health and medical asset provisions. There are currently five APHTs, each of which is a work force comprised of 47 PHS-trained Commissioned Corps officer responders. Yet each APHT is scalable, and can provide only those resources needed or requested by local authorities. Each APHT is also responsive, meaning that an APHT can deploy within 36 hours of activation.

Each APHT is particularly capable of responding to the many immediate and midterm public health issues or needs arising from a major disaster or other event. An APHT can, for example, collect essential information to support local decision-making and can help to evaluate—or to set—public health priorities. APHT’s structure includes nine mini-teams or sections of specific expertise in public health. Team leaders and deputy team leaders provide coordination and management reporting. The three areas of APHT activities and reporting include:

1. Epidemiology/surveillance.
2. Preventive (medical) services delivery (e.g., disease prevention, vaccinations, laboratory information, health information).
3. Environmental public health (air, water, wastes, vectors, food, safety, shelter, etc.).

All APHTs possess established communications and other equipment requirements to operate effectively in disaster-affected locations and surrounding areas.

If local public health infrastructure suffers damage from a natural disaster or other event, APHT can assist local officials in response or recovery efforts. Assistance can include augmenting the local health work force to speed up response or recovery, or, with especially difficult matters, assisting or advising local health decision-makers. Each APHT can also provide essential services to preserve the lives and the health of affected and returning populations. APHT can assist local officials with planning and with proposals for restoring public health infrastructure, for improving that infrastructure, or for both. Further,

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each APHT can collect and analyze information for evaluating and for improving local programs' effectiveness or service delivery. The bottom line is that all APHT have the technical consultation skills and abilities to preserve and to safeguard local public health, especially during emergencies.

The Secretary and Assistant Secretary for Health have the authority to activate an APHT and do so in response to requests made through the Surgeon General.

Rapid Deployment Force (RDF) Teams – RDF teams provide resources and assistance to local health authorities throughout the United States. They were created in 2006 as part of the NRP's ESF-8 public health and medical asset provisions. There are currently five RDF teams, each of which is a work force comprised of 105 PHS-trained Commissioned Corps officer responders. Yet each RDF is scalable, and can provide only those resources needed or requested by local authorities. Each RDF is also responsive, meaning that an RDF can deploy within 12 hours of activation.

Each RDF is particularly capable of responding to the many immediate and midterm public health and medical issues or needs arising from a major disaster or other event. RDF teams can be divided into "blue" and "gold" teams, such that one team will be primary and the other secondary for their on-call month. As constituted, the RDF can be divided in half for smaller responses, or for two separate mission assignments in the same theater of operations. If response needs exceed the capacity of the on-call RDF, the team can be augmented with appropriate officers from Tier 3. RDF teams receive established communications and other equipment requirements to operate effectively in disaster-affected locations and surrounding areas from the Office of Preparedness and Emergency Operations. The primary areas of RDF activities and reporting include:

- Mass care (primary care, mental health, and public health services for sheltered populations)
- Point of distribution operation (mass prophylaxis and vaccination)
- Medical surge
- Isolation and quarantine
- Pre-hospital triage and treatment
- Community outreach and assessment
- Humanitarian assistance
- On-site incident management
- Medical supplies management and distribution
- Public health needs assessment and epidemiological investigations
- Worker health and safety
- Animal health emergency support.

If local health infrastructure suffers damage from a natural disaster or other event, RDF teams can assist local officials in response or recovery efforts. Assistance can include augmenting the local health work force to speed up response or recovery, or, with especially difficult matters, assisting or advising local health decision-makers. Each RDF can also provide essential services to preserve the lives and the health of affected and returning populations. RDF members assigned to clinical responsibilities as a function of their team selection will be clinically current, as defined in their deployment role.

The Secretary and Assistant Secretary for Health have the authority to activate an RDF and do so in response to requests made through the Surgeon General.

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Mental Health Teams (MHT) – MHTs provide resources and assistance to communities throughout the United States. They were created in 2006 as part of the NRP’s ESF-8 public health and medical asset provisions. There are currently five MHTs, each of which is a work force comprised of 26 PHS-trained Commissioned Corps officer responders. Yet each MHT is scalable, and can provide only those resources needed or requested by local authorities. Each MHT is also responsive, meaning that an MHT can deploy within 36 hours of activation.

Each MHT is particularly capable of responding to the many immediate and midterm behavioral health issues or needs arising from a major disaster or other event. MHTs can be divided into “blue” and “gold” teams, such that one team will be primary and the other secondary for their on-call month. As constituted, the MHT can be divided in half to 13 members for smaller responses or for two separate mission assignments in the same theater of operations. If response needs exceed the capacity of the on-call MHT, they may be augmented by mental health providers Tier 3. MHT capabilities include:

- Incident assessment and personnel assessment, diagnosis, and treatment
- Screening for suicide risk, acute and chronic stress reactions, substance abuse, and mental health disorders
- Support for development of behavioral health training programs for impacted populations
- Utilizing specialized counseling
- Psychological first aid, crisis intervention, and time-limited counseling for serious mental illness and/or substance abuse.

If local public health infrastructure suffers damage from a natural disaster or other event, MHTs may collaborate with local officials and professional groups to assess community mental health prevention and treatment needs, providing consultation to medical staff on the effects of stress on patient behavior. MHTs are skilled at assessing the scope and intensity of events, as well as the depth of community exposure to trauma. MHTs consult with on-site Incident Commanders (IC) to prevent and manage stress, including site conditions and work hours to ensure continued mission readiness of responders. After providing patient assessment and diagnosis, MHTs will assist persons requiring more intensive psychological interventions, including psychopharmacology consultation through a psych-pharmacy specialist referral when required. Further, each MHT can obtain and analyze information for evaluating and for improving local programs' effectiveness or service delivery. The bottom line is that all MHTs have the technical consultation skills and abilities to preserve and to safeguard local behavioral health, especially during emergencies.

The Secretary and Assistant Secretary for Health have the authority to activate an MHT and do so in response to requests made through the Surgeon General.

Services Access Teams (SAT) – SATs provide resources and assistance to local health authorities throughout the United States. They were created as part of the NRF’s ESF-8 public health and medical asset provisions. Like all Commissioned Corps response teams, they may be deployed in response to an ESF-8 or non-ESF-8 public health emergency. Each SAT is comprised of 10 PHS-trained Commissioned Corps officer responders, enabling scalability and ability to provide only those resources needed. Each SAT is responsive: as a Tier 2 team, the SAT can deploy within 36 hours of activation. Each SAT is on-call 1 out of every 5 months and typically deploys only during the on-call month. Deployments typically do not exceed 2 weeks. Each SAT member is expected to participate in up to 2 weeks of response team training per year.

Each SAT is capable of responding to the many immediate and midterm public health emergencies and urgent health needs arising from a major disaster or other event. The SAT assesses and monitors ongoing health and human services needs of affected populations and is particularly skilled at serving “at risk”

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individuals and populations, defined as people who are unable to plan, advocate, or obtain resources and/or services to meet basic health and safety needs.

The subgroup of individuals most likely to be impacted include: elderly, developmentally disabled, mentally ill, and minors separated from guardians. The SAT can be divided into “blue” and “gold” teams, such that one team is primary and the other secondary for their on-call month. As constituted, the SAT can be divided in half for smaller responses, or for two separate mission assignments in the same theater of operations. If the response needs exceed the capacity of the on-call SAT, the team can be augmented with appropriate officers from Tier 3.

SATs utilize established communications and other equipment to operate effectively in disaster-affected locations and surrounding areas. The primary areas of SAT activities and reporting include:

- Needs Assessment
- Plan Development/Cultural Sensitivity
- Advocating/Connecting
- Clinical Care Coordination
- Continuity/Transition Management
- Psycho-Social Management
- Re-integration
- Confidentiality assurance.

If a state or local public health infrastructure suffers damage from a natural disaster or other event, the SAT can assist in response and/or recovery efforts. Assistance includes augmenting the local health work force, as well as liaising with and advising health decision-makers. Each SAT focuses on ensuring access to essential services to preserve the lives and the health of affected, displaced, returning, and vulnerable individuals and populations.

Further, each SAT is able to collect and analyze information for evaluating and for improving state or local-program effectiveness or service delivery. All SATs possess technical consultation skills and abilities to preserve and safeguard public health.

The Secretary and Assistant Secretary for Health have the authority to activate a SAT and do so in response to requests made through the Surgeon General.

6.5.4 Recommended Actions

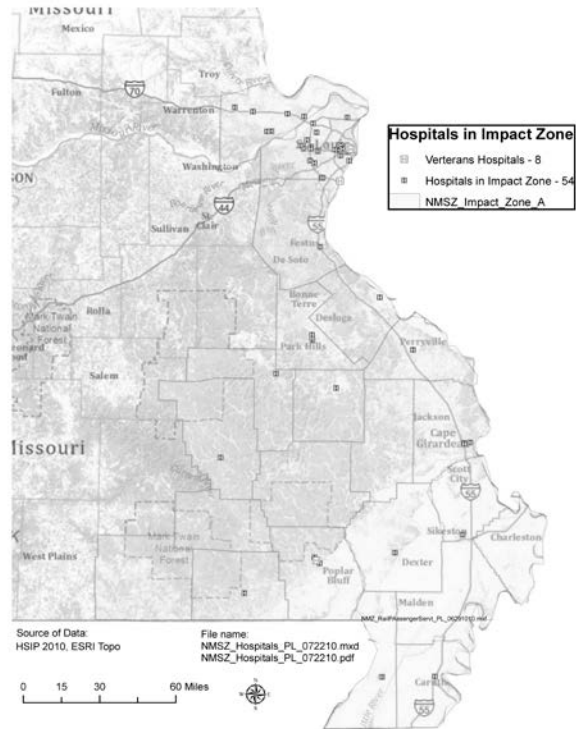
- Activate the NDMS.
- Deploy NDMS Teams, personnel, and caches based on Rapid Needs Assessments from field reports or estimates based on media reports and other open source information.
- Determine actual requirements and use as basis for health care personnel allocation of teams of personnel or individual support to healthcare infrastructure missions. An appropriate requirements request will be submitted by the JFO to NDMS for staffing.

6.6 Maps of Concern to Public Health and Medical Operations

Maps indicating facilities of concern to ESF-8 operations are provided on the following pages.

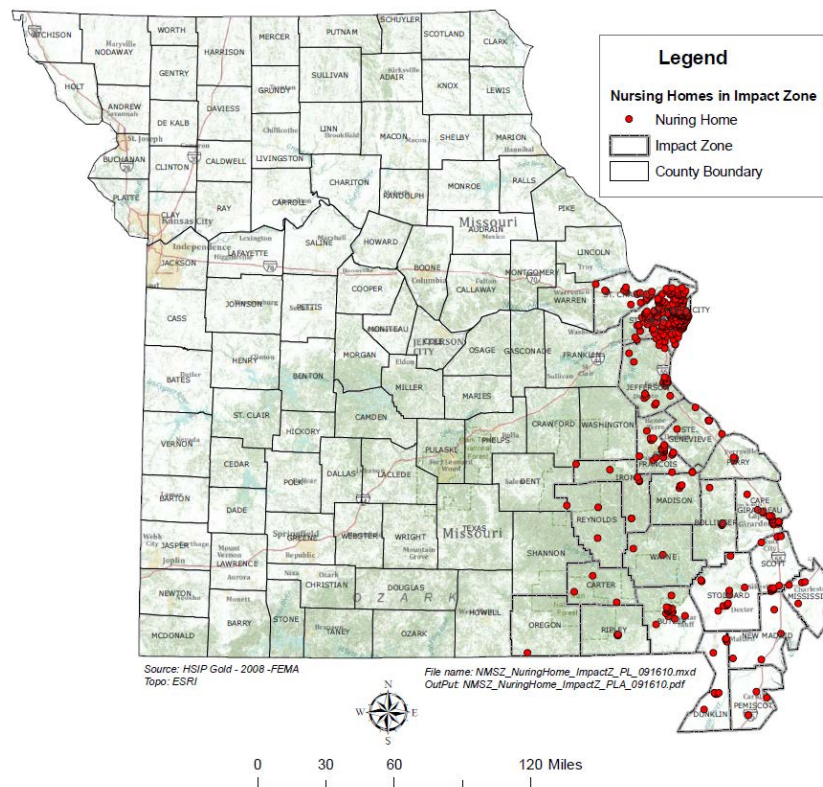
Hospitals within the impact zone are provided in Figure C8-4:

Figure C8-4 Hospitals in the Impact Zone



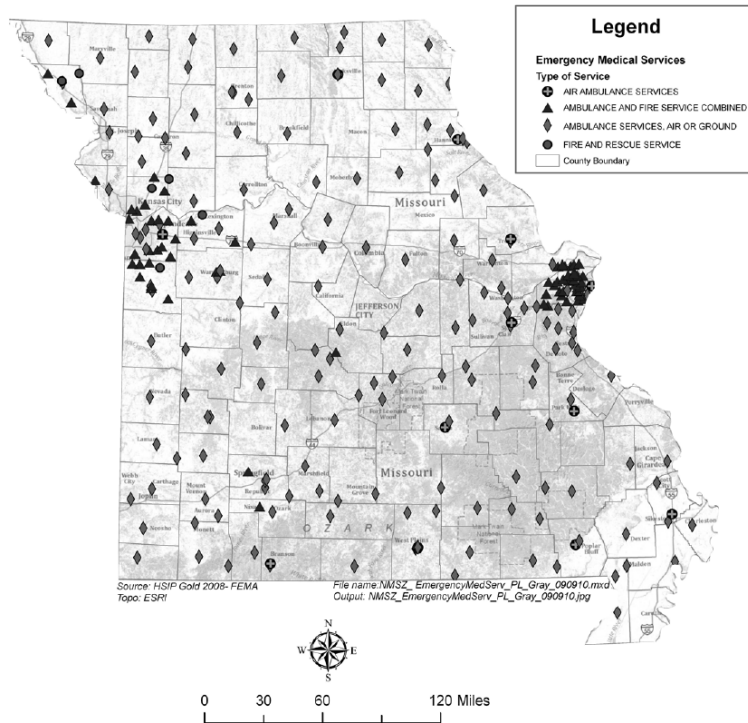
Nursing homes in the impact zone are provided in Figure C8-5:

Figure C8-5 Nursing Homes in the Impact Zone



Statewide EMSs are provided in Figure C8-6.

Figure C8-6 Emergency Medical Services in the State of Missouri



Statewide air ambulance services are provided in Figure C8-7:

Figure C8-7 Statewide Air Ambulance Services – REDACTED

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C9
ESF-9, Search and Rescue Operations**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

The Emergency Support Function (ESF)-9 Appendix to Annex C of the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for joint local, state, and federal search and rescue (S&R) operations following a catastrophic earthquake affecting the state.

A large portion of the NMSZ in Missouri is considered rural and will require wide-area search operations. The counties with the largest populations in the impact zone are St. Louis, Jefferson, and St. Charles, which surround the City of St. Louis, with a combined population of 1,640,064. The next populous geographic area includes the counties of Cape Girardeau (73,243), St. Francois (63,214), and Butler (41,383). Structural collapse S&R resources (federal and state) will be utilized in the populated urban areas suffering extensive collapsed structural damage while other local and state S&R resources will be tasked to surrounding areas. Wide-area search will be done by search trained individuals and volunteers by air and by ground, if accessible.

Under the Missouri State Emergency Operations Plan (SEOP), the Missouri Division of Fire Safety (MDFS), Office of the State Fire Marshal has primary responsibility for state S&R operations. Missouri ESF-9 resources – comprised mainly of voluntary mutual aid assets - will provide a coordinated search and rescue response to disasters in both rural and urban environments. Special emphasis will be placed on their ability to locate, extricate and provide medical assistance to victims trapped in collapsed buildings, from light residential construction to heavy reinforced multi-story concrete structures.

Under the National Response Framework (NRF), the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) is designated as Coordinator and Primary Agency for structural collapse S&R operations. The purpose of ESF-9 is to provide federal support for specialized life-saving assistance associated with urban search and rescue (US&R), waterborne S&R, and inland/wilderness search and rescue operations. Specific to the NMSZ, under the NRF, ESF-9 manages and coordinates the 28 US&R Task Forces (TF) and US&R Incident Support Teams (IST) by mobilizing search and rescue resources in support of local and state public safety agencies. Other local, federal, and international resources will be integrated into ESF-9 operations

While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire state including the 47 counties recognized by the state as having a high potential to be negatively impacted by a seismic incident. This Plan also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties or the effects of after shocks are provided unless denoted.

According to modeling data from the MAE Center, the major impacts of the earthquake expected in the highest impacted Missouri counties are depicted in the following tables. Table C9-1 shows the number of collapsed structures by construction type, Table C9-2 shows the number of collapsed structures by impacted county.

Table C9-1 Building Collapse by Type

General Building Type	Total Buildings	At Least Moderate Damage	Complete Damage	Collapse Rate for Complete Damage	Number of Collapsed Structures by Type:
Wood	1,418,000	40,200	20,300	6%	1218
Steel	17,500	1,200	500	12%	60
Concrete	5,200	300	200	20%	40

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General Building Type	Total Buildings	At Least Moderate Damage	Complete Damage	Collapse Rate for Complete Damage	Number of Collapsed Structures by Type:
Precast	5,200	300	200	26%	52
Reinforced Masonry	2,900	200	100	20%	20
Unreinforced Masonry	460,200	26,800	14,300	30%	4290
Manufactured Housing	192,800	17,800	8,200	6%	492

Table C9-2 Building Collapse by County

Impacted Counties (including St. Louis City)	Type I Collapsed Buildings	Type II Collapsed Buildings	Type III Collapsed Buildings	Type VI Collapsed Buildings
Bollinger				
Butler	6	3	278	171
Cape Girardeau	4	3	146	71
Carter			20	16
Dunklin	14	9	695	214
Iron				
Jefferson	1		113	88
Madison				
Mississippi	6	3	358	88
New Madrid	8	5	463	148
Oregon			17	15
Pemiscot	9	5	495	137
Perry			14	11
Reynolds			52	43
Ripley				
Saint Charles			37	24
Saint Francois				
Saint Louis	1	1	137	86
Saint Louis City	3	4	168	102
Saint Genevieve	1	1	32	22
Scott	16	8	627	193
Stoddard	9	5	404	104
Wayne			23	29

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Total	78	47	4079	1562
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All damaged buildings in the affected area will need to be searched. The amount of required resources estimated for these tasks are shown in Table C9-3.

Table C9-3 Estimated Resource Requirements

Asset	Description	Total in Missouri	Total Requirement	Support Requirement
US&R Type I Task Force	Task force trained and equipped for light frame, heavy wall, heavy floor and concrete-steel construction (heavy reinforced concrete) – 70 personnel	1	20	19
Collapse S&R Type I Team (not the same as a US&R Type I Task Force)	A State, local, or private technical rescue team that responds to locate, rescue, and recover individuals trapped in a fallen structure or buried in structural collapse; operates at incidents involving collapse or failure of heavy floor, pre-cast concrete, and steel frame construction	21	47	26
Collapse S&R Type II Team(not the same as a US&R Type II Task Force)	Conduct search and rescue operations at structural incidents involving the collapse or failure of heavy wall construction	27	6	21
Collapse S&R Type III Team	Conduct search and rescue operations at structure collapse incidents involving the collapse or failure of light frame construction	7	195	188
Collapse S&R Type IV Teams	Conduct search and rescue operations at incidents involving non-structural entrapments and minimal removal of debris and building contents	7	39	32

The following figures show the most densely populated areas that will require urban search and the rural areas that will require wide area search and possible aerial search. The figures also show the numbers of collapsed buildings in the impact zone and counties that will required the most number of hours for search and rescue operations.

Figure C9-1 Population Density

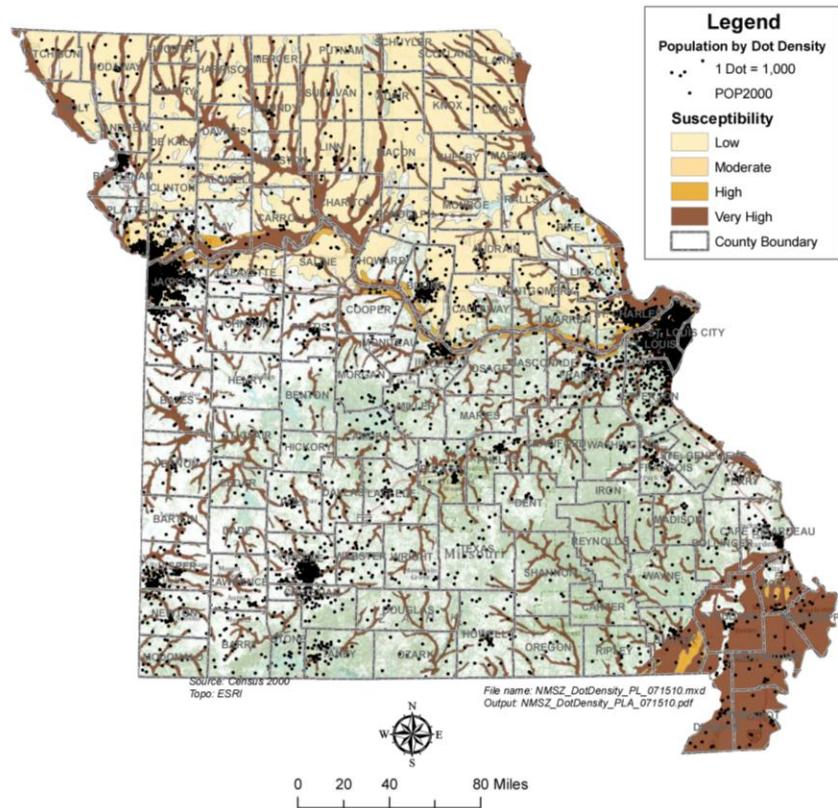


Figure C9-2 Housing Units

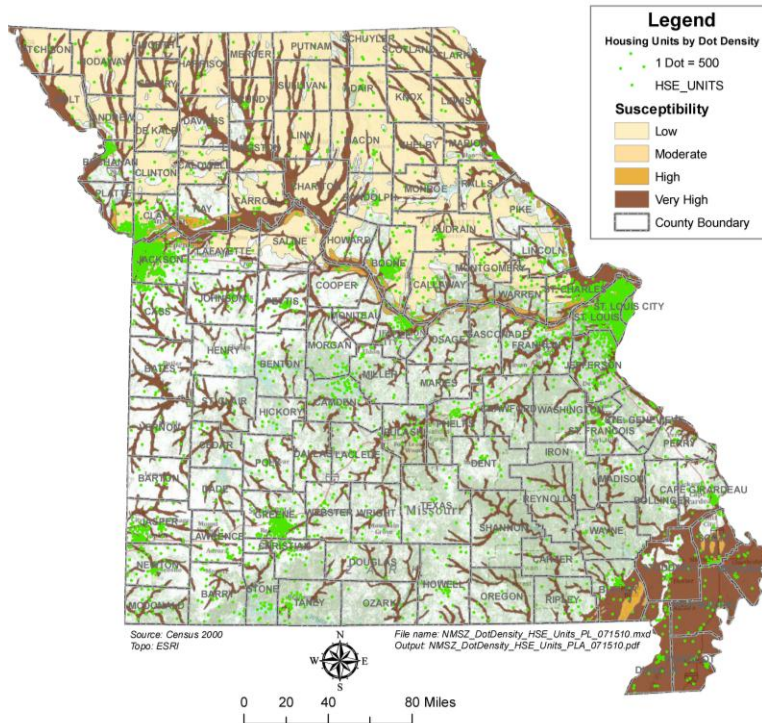


Figure C9-3 Collapsed Buildings in the Impact Zone

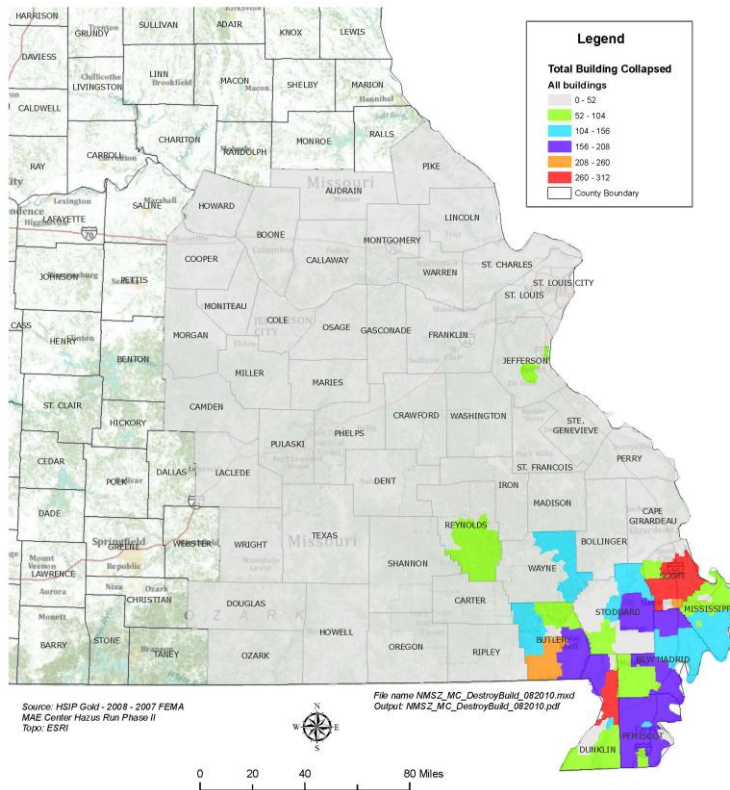
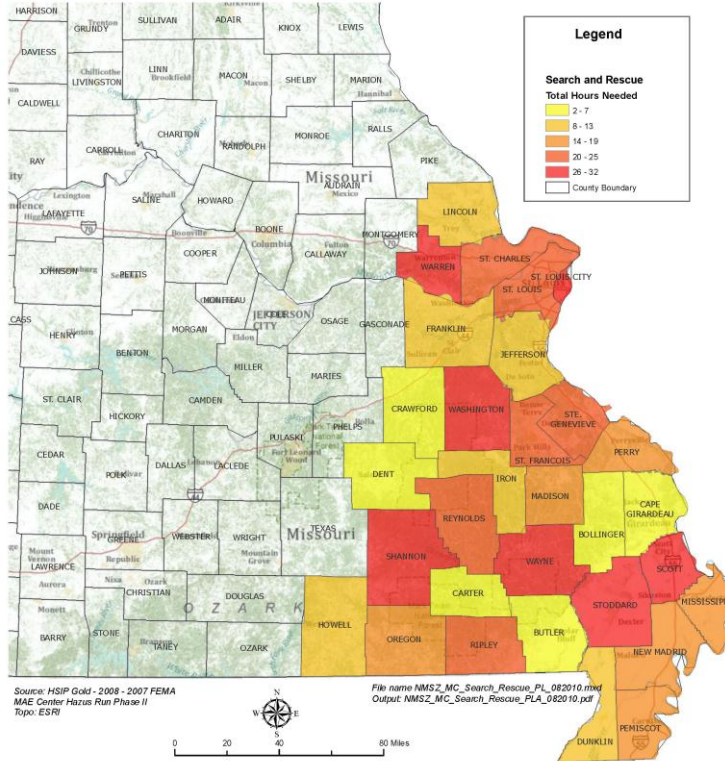


Figure C9-4 Hours of Search and Rescue by County



1.1 Purpose

The purpose of this annex is to provide ESF-specific information for the OPLAN. The ESF-9 Search and Rescue Annex details the ESF’s limitations, organization, and course of action to execute the roles and responsibilities assigned to the ESF during a NMSZ incident. The OPLAN annex identifies roles and responsibilities, enhancing unity of effort, and links existing plans. Specifically, this Annex provides the ESF-9 Coordinator with the basis for evaluating and accepting or redirecting mission assignments and tasks received from the state, FEMA, or other ESFs in response to an earthquake event in the NMSZ. This Annex is devised to support the following Objective as defined by the Region VII Senior Leadership Steering Committee (SLSC) and the ESF-9 Integrated Working Group (IWG):

Objective: Prioritize and conduct search and rescue operations

1.2 Considerations

The following considerations are ESF-9 specific. General considerations are included in Section 1.5 of the Base Plan.

- The amount of time to perform rescue activities is limited. Although victims have been found alive and recovered as long as 19 days post incident, the conventional expectation for finding living survivors is typically not more than one week.
 - Initial operations will be blitz oriented, resource intensive, and logistically demanding.

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- Ongoing fires and continuing aftershocks will affect search and rescue operations.
- Ongoing unmitigated damage to critical infrastructure such as roadways and pipelines will affect rescue operations.
- International aid will be offered in the form of S&R teams and logistics support. FEMA will, in coordination with the Department of State (DOS), U.S. Agency for International Development (USAID), Office of Foreign Disaster Assistance coordinate the use and employment of international search and rescue assets/resources if the level of response will overwhelm the nation's capability.
- Some geographic areas may be isolated due to infrastructure damage (i.e. communities within the Missouri bootheel) making it imperative that all stakeholders, local, state and federal are prepared to respond and act.
- The ability to mobilize resources may exceed the capability to manage those resources.
- Many roads and highways will be impassable to first responder assets immediately following the earthquake because of debris on the roads, damage to roads, and collapsed bridges. This will have a significant negative impact on the emergency response. Some areas may be initially accessible only by air or water.
- Hazardous conditions, weather, size of area, scope, access, and criminal activity (hazard) may limit the efficiency with which areas can be searched for victims.
- Search operations will be assisted by non-technical personnel and volunteers (i.e. Community Emergency Response Teams [CERT], active military forces, and Volunteer Organizations Active in a Disaster [VOAD]).
- Many of the Missouri-based local jurisdictions' S&R resources, both heavy and light, will be fully engaged in response actions within their own jurisdictions. ESF-9 resources will need to be ordered from federal agencies and states that are outside the NMSZ.
- Limited federal Type-I US&R resources will be available for deployment from FEMA for the first 24 hours due to logistical considerations. Type II and Type III S&R teams from adjoining states and local municipalities will be more prevalent initially.
- Most likely the incident will require more Type I S&R resources than are available.
- Search and rescue response systems must be coordinated on a statewide basis to provide specialized lifesaving assistance. Due to the large numbers of collapsed and damaged structures, readily available rescue resources will be over taxed and extremely limited.
- Search and rescue personnel will need to coordinate with ESF-8 for medical care issues.
- Local residents, workers, and/or converging volunteers may initiate local S&R efforts, but will usually lack specialized equipment and training. Spontaneous volunteers will require coordination and direction within the local incident command structure.
- Local and state firefighting, S&R, HAZMAT, and EMS response capabilities are drawn from the same resources within the state. There are competing priorities among these state response resources for personnel and equipment.
- Not all S&R resources have integrated confined space medical components.
- The level of effort required to restore (or replace) equipment cache items will depend on how heavily they were used and the extent to which they need to be decontaminated/cleaned.

1.3 Assumptions

The following assumptions are ESF-9 specific. General assumptions are included in Section 1.6 of the Base Plan.

- Specialized life-saving assistance associated with US&R, waterborne search and rescue, and inland wilderness search and rescue operations will be a premium.
- ESF-9 operations will be carried out based on a targeted integrated response.
- Integrated search assignments and missions for technical rescue will be prioritized based on potential loss of life and number of heavy structures impacted.
- The goal is to perform search and rapidly triage areas that need technical rescue efforts. Technical rescue efforts will then be mission tasked based on established priorities.
- Search and rescue assets will be mission tasked based on capabilities.
- No single organization in the State of Missouri has sufficient resources to provide adequate S&R services. Therefore, S&R authorities will use all available resources, including federal, state, local, private, and volunteer organizations.
- FEMA maintains the ability to task federal US&R missions, support agencies maintain waterborne and inland/wilderness S&R capacity. Overall S&R operations will be conducted in accordance with the U.S. National Search and Rescue Plan (NSP).
- The existing population of qualified structural engineers is not sufficient to handle the requirements posed by the MAE Center data.
- Local S&R teams within the affected area will initially be working within their own guidelines and mission statements.
- Aviation assets are of critical importance to local, state and federal S&R activities and are immediately requested and assigned on priority to federal S&R efforts.
- Security (public safety and law enforcement) within the event area is critical to the safety of first-responders and the conduct S&R operations.
- Complexity and circumstances of the entrapment affect the amount of time required to safely access, stabilize, and extricate victims.
- Operational periods will vary based on workload intensity in the various areas.
- Local, state and federal S&R missions will be prioritized according to the potential loss of human lives, critical facilities, equipment or supplies, accessibility of the affected area.
- As damage assessment reports become available, state and federal S&R missions will be assigned as warranted.
- Urban search tactics and wide area search tactics will be employed based on the area.
- Civil Air Patrol (CAP) will provide aerial assets to assist in search missions and identify possible rescue operations. Aerial assessments will be needed to identify collapsed structures in areas that are inaccessible by ground transportation.
- MO TF-1 is considered an in-state resource unless and until federalized by FEMA.
- Federal US&R assets under the control of FEMA will include activation of an overhead US&R IST to assist with the integration and coordination of national US&R TFs with local ICS.

- Use of NIMS/ICS will be critical in maintaining an effective command and management structure.
- While initially self-sufficient, federal S&R teams will be integrated into the logistical support processes.
- Reports of collapsed buildings with people trapped will be received from a variety of sources including the following:
 - Dispatchers at local 911 centers.
 - Emergency responders from the field.
 - News media.

1.4 Limiting Factors

- The state's S&R capability will be quickly overwhelmed due to the number of collapsed structures requiring S&R assessments and operations.
- Assistance from local resources outside the affected areas and federal US&R teams will take time to mobilize.
- Nebraska Task Force (NE-TF1) is the only FEMA Type I US&R resource within Region VII outside the NMSZ.
- A significant number of ESF-9 resources will be immediately affected, or indirectly affected by the incident, which will most likely cause some added delay in staffing needed ESF-9 positions.
- A significant number of ESF-9 resources will be flying into FEMA Region VII from outside the 8-state impact area. Military flights west of the impacted area will be at a premium.
- Damage to main transportation routes will impact all response operations.
- Multi-disciplined firefighting personnel will not be available to fulfill each mission (i.e., firefighters also employed as S&R will not be available for fire or hazmat response).
- EMAC or federal response teams will require forward logistical support that may not be established for 72 hours or more.
- Because of personnel challenges it may not be feasible to have an access control system at the perimeter of all rescue operations

2.0 Mission

Local, state and federal partners will implement an integrated and highly prioritized S&R response to save and sustain the lives of Missouri residents immediately following a catastrophic earthquake.

The mission of ESF-9 for the State of Missouri will be to provide a coordinated search and rescue response to disasters in both rural and urban environments. This includes a systematic search for locating, extricating, and providing medical assistance to victims. The mission of federal ESF-9 partners under the NRF is to provide federal support for the National US&R Response System, which consists of US&R TFs, ISTs, and technical specialists for an incident requiring a coordinated federal response for assistance.

While ESF-9 also encompasses waterborne and inland/wilderness S&R operations, the majority of equipment and personnel demands for a NMSZ incident are anticipated to be Type I US&R and wide area search. ESF-9 also provides support to ESF-5 for initial damage assessment and ESF-8 for mass fatality operations and may be sub-tasked by any of these ESFs to provide secondary support.

Animal search and rescue services provided by animal control agencies and humane organizations will be integrated with human search and rescue operations as required.

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases of response within specified periods of time. A description of these Phases is in Section 3.3 of Annex C – Operations. Table C9-4 lists the (sub)phases of Phase 2 (Phases 2a, 2b, and 2c).

Table C9-4 Response Phase Operational Periods

Response Phase	Operational Period
2a – Immediate Response	E + 24 hrs
2b – Deployment	Event (E) + 24 – E + 72 hrs
2c – Employment/Sustained Response	E + 72 – E + 120 hrs +

The phases of response and operation are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

3.1.1 General Concepts

The priorities for ESF-9 S&R operations are as follows:

- Immediate life safety of first responders and victims.
- Transportation of resources.
- Establishment of communications.
- Assessment of the situation and information dissemination to the SEOC.

Initial search and rescue operations will be local efforts according to the ability of the local first responders and volunteers. The goal of the state and federal partners will be to provide operational support as needed to local S&R assets deploying to the NMSZ within Missouri after a major earthquake in order to initiate an immediate response.

The doctrine of “do no additional harm” will apply to all S&R operations. Local, state and federal S&R personnel will take into consideration the dangers of contamination and unstable physical structures before entering into an area that may contain surviving victims and will take appropriate safety and protective measures before commencing operations.

Expected needs for search and rescue operations include:

- Additional search and rescue teams of various FEMA kinds and typing.
- Equipment and supplies for search and rescue operations and sustainment.

Local Incident Commanders (IC) should prepare for the following response times for state and federal S&R resources:

- Local response time 0 – 2 hours.
- Inter-state response time 2 – 12 hours.

- Intra-state response time 12 – 24 hours.
- Federal response time 12 – 24 hours.

Given that S&R is extremely time-sensitive, initial operations will be undertaken by state and local responders and those volunteer personnel willing to assist in locating victims. National US&R TF response assets will immediately deploy according to the Catastrophic Incident Supplement (CIS).

3.1.2 Phased Response Concepts

3.1.2.1 Phase 2a: Immediate Response

Inter-state and federal S&R assets will deploy to the State of Missouri after a catastrophic earthquake (Phase 2a) in order to provide an immediate response to augment local and intra-state S&R and medical capabilities. Following the earthquake and as the situation becomes clear, additional S&R and medical resources will be deployed to provide further assistance.

Purpose of Phase

Identify and deploy search and rescue assets for employment by local IC in the affected area to save as many lives as possible.

End State of Phase

Mobilize local and intra-state S&R resources and begin a systematic search of the affected areas, prioritizing areas that are heavily occupied, identifying individuals in need of specialized rescue, begin the extrication of individuals trapped in the affected areas as it become accessible with priority to saving as many lives as possible.

Local Mission-essential Tasks

Local ICs will initiate S&R activities using available resources. Available resources could include local fire personnel trained in S&R, CERT teams trained in search operations, volunteers from the general population trained just-in-time to search the affected area. Given the number of collapsed structures, demand for additional resources will be immediate. The specific ESF-9 tasks to be provided to by local agencies are listed below:

1. Mobilize local search and rescue teams and/or volunteers
 - a. Engage CERT to assist with search in their neighborhoods under the direction of the local incident commander (IC).
 - b. Mobilize local special rescue teams.
 - c. Perform light rescue missions as tasked by the local IC.
2. Provide operational priorities to field teams.
3. Notify the SEOC of the local ICS structure and who is serving as the local IC.
4. Prepare for an influx of first responders.
5. Systematic search of the affected areas.
6. Mark buildings assessed utilizing the marking system provided by the SEOC.
7. Identify trapped individuals in need of specialized rescue beyond the capabilities of the local responders.
8. Gather information about collapsed buildings with people trapped from all available sources and pass to the SEOC:

- a. Number of buildings searched.
 - b. Number of rescued individuals.
 - c. Where victims were taken.
 - d. Number of fatalities.
 - e. Number of rescued companion animals.
9. Request the quantity and type of resources needed from the SEOC.
 10. Enact local mutual aid contracts.

State Mission-essential Tasks

Intra-state S&R resources for support of field-level incident response are organized through the Statewide Fire Mutual Aid System, which is managed by Missouri Division of Fire Safety (MDFS). Under the Statewide Fire Mutual Aid System, local and state firefighting, S&R, and hazardous materials resources from state and local jurisdictions throughout Missouri can respond to the earthquake.

Responsibilities of state agencies are described in the Missouri SEOP, Annex O, Search and Rescue. The specific ESF-9 tasks to be provided to by state agencies are listed below:

Missouri Division of Fire Safety:

1. Upon verification of 6.5 magnitude or greater incident, activate Statewide Fire Mutual Aid System.
2. Coordinate the Statewide Fire Mutual Aid System and overall state level S&R operations in the affected area.
3. Support S&R teams with a State Liaison
 - a. Conduct joint assessments to determine priority of capability deployments.
 - b. Coordinate with local emergency operations centers on deployment of search team assets.
4. Mobilize Missouri Task Force 1 (MO-TF1).
5. Provide building marking system to local S&R responders.
6. Implement an ESF-9 information collection plan to gather essential elements of information.
7. Coordinate with ESF-7 to ensure logistical needs are established for state S&R operations and support.
8. Coordinate with ESF-8 regarding casualty collection points and fatality collection points and to disseminate the state procedure for handling the deceased once located by S&R teams, ensuring that this information is provided to all S&R teams before employment.
9. Coordinate with SEMA to submit pre-scripted EMAC requests for out-of-state assets and prepare ARF for federal assets that may be needed.
10. Access GIS and U.S. National Grid maps information from SEMA for use in the affected area.
11. Request Civil Air Patrol support for aerial/ground S&R.
12. Coordinate with ESF-1 and Air Ops to enable S&R assets access to operational areas.
13. Coordinate with ESF-2 to develop communications plan for search and rescue.
14. Assign search missions and rescue missions as warranted and as situational information becomes available.

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15. Gather search data from search teams including structures searched, number of occupants and locations of occupants found.
16. Consolidate information and provide to ESF-5 for the SITREP and incident action planning.
17. Prioritize rescue attempts based on the following:
 - a. Number of people trapped in a particular site.
 - b. Potential risk to S&R personnel.
 - c. Probability of successful rescue.
18. Immediately request assistance, including the following:
 - a. Intra-state mutual aid resources.
 - b. Deployment of federal US&R teams, all identified US&R first responders and equipment will mobilize to the area to meet the immediate needs of those needed special rescue.
 - c. Structural engineering/shoring assistance from USACE.
 - d. Engineering support from MoDOT and other private sources.

Missouri Department of Conservation:

Provide technical assistance, equipment and personnel for S&R operations as requested.

Missouri Department of Corrections:

Coordinate with ESF-13 on security issues for S&R activities.

Missouri Department of Transportation:

Provide heavy equipment and equipment operators as requested to assist with rescue missions in the affected area.

Missouri Department of Natural Resources:

Coordinate with ESF-1 to provide 4WD vehicles, ATVs, small watercraft, equipment and personnel as requested to assist with S&R operations.

Missouri National Guard:

1. Coordinate with ESF-1 and Air Operations to support aerial S&R missions with available assets including fixed and rotary aircraft and crews as requested.
2. Support surface S&R with available assets including personnel, transportation and the CBRNE Emergency Response Force Package (CERFP).
3. Request additional (other states) National Guard assets to expand/sustain MONG capabilities as requested.

Missouri State Highway Patrol:

1. Coordinate with ESF-1 and Air Operations to provide aerial S&R assistance.
2. Assist with ground S&R operations using available ground transportation as requested.

Civil Air Patrol:

1. Coordinate with ESF-1 and Air Operations to provide air and ground transportation, aerial reconnaissance and imaging, and aerial search.
2. Coordinate with ESF-2 to provide communications for S&R operations as requested.

Missouri Department of Public Safety:

1. Provide assistance with the coordination of mutual aid as requested.
2. Coordinate with ESF-13 to provide law enforcement personnel as requested to assist with S&R operations.

Missouri State Water Patrol:

Assist with water rescue and recovery; provide water patrol dive team and law enforcement personnel, and equipment as requested.

Missouri Voluntary Organizations Active in a Disaster:

1. Provide and coordinate volunteer organizations to support search efforts.
2. Provide CERT teams trained in search operations and personnel capable of assisting with search operations as requested.

Federal Mission-essential Tasks

ESF-9 will work with all support agencies related to the mission essential objectives above and cooperate with other federal, state, and local agencies as required. Under the NRF, FEMA is the Coordinator and Primary Agency for Federal ESF-9, S&R for structural collapse. The mission of federal ESF-9 includes: management of US&R TF deployment to, employment in, and redeployment from the affected area; and coordinating logistical support for federal US&R assets during field operations. S&R components also provide support to ESF-8 and ESF-5 of the remaining 14 ESFs. This support is coordinated through ESF-9, and is predicated on the availability of resources. Resources are assigned commensurate with each unit's level of training and the adequacy and availability of equipment. The federal S&R response system all-hazard doctrine states that missions/tasks will be accepted based on the aforementioned mission essential operational objectives.

One Type I US&R task force (MO-TF-1) has been predetermined for a Missouri earthquake and will be considered a state asset. There is also one additional task force located in FEMA Region VII in Lincoln, Nebraska. FEMA will determine the appropriate task forces to activate based on geographic location of available task forces; the rotation system; task force levels of readiness; individual task force transport requirements; and availability of transport aircraft. The capabilities of the available Federal Incident Support Bases (ISB) may influence the assignment of specific task forces. FEMA will also deploy an Incident Support Team (IST) to support the S&R effort at the federal, state, and local levels in order for the supporting elements to be in place prior to task force arrival. Federal US&R teams can mobilize within 6 hours and be operating within 24 hours, with deployment duration of 10 to 14 days (6 - 8 weeks with rotating crews).

A catastrophic earthquake (6.5 magnitude) occurring within the NMSZ will automatically trigger activation and deployment of FEMA US&R task forces to ISBs identified by the RRCC. Formal requests for US&R task forces from the ISB for employment of those resources will occur through the SEOC to the IMAT, RRCC, or NRCC. FEMA also notifies SEMA of the states from which the task forces will respond and requests their activation. Allocation of the remaining task forces is determined based on damage assessment information, FEMA will decide which task forces will be deployed to the ISBs and will establish appropriate transportation for them. The IST will coordinate transportation from the Staging Area to the designated location identified by the SEOC. After the task force arrives at the designated location, it reports to the IC and, under the management of the IST, receives a strategic assignment to begin operations.

The specific ESF-9 tasks to be provided by federal agencies are listed below:

Federal Emergency Management Agency:

1. Deploy ESF-9 Liaison to the SEOC
 - a. Conduct joint assessments to determine priority for asset deployment.
 - b. FEMA ESF-9 Liaison at SEOC will contact NRCC to determine which teams were automatically activated and pushed to FEMA staging areas.
 - c. Determine ETA for team(s) within the state based on info from the ESF-9 cell within the NRCC.
2. Based on S&R assessment:
 - a. Mobilize other federal US&R resources that support ESF-9.
 - b. Coordinate with state ESF-9 on location for federal S&R operations, insuring that the FEMA IST(s) are provided this information.
3. Coordinate with ESF-8 to address medical issues.

3.1.2.2 Phase 2b: Deployment

Purpose of Phase

Continue to identify and deploy search and rescue assets to the affected area as more areas become accessible to save as many lives as possible.

End State of Phase

Continue a systematic search of the affected areas, prioritizing areas that are heavily occupied, identifying individuals in need of specialized rescue and identifying fatalities for removal. Continue the extrication of individuals trapped in the affected areas as more areas become accessible with priority to saving as many lives as possible.

Local Mission-essential Tasks

1. Continue to conduct urban and wide area search missions:
 - a. Utilize local air capabilities if applicable.
 - b. Request additional air support from the SEOC.
 - c. Utilize local water rescue capabilities if applicable.
 - d. Request additional water rescue from the SEOC.
2. Continue to provide information to the SEOC on:
 - a. Number of buildings searched.
 - b. Number of rescued individuals.
 - c. Number of fatalities.
 - d. Number of rescued companion animals.
3. Continue to gather information about collapsed buildings with people trapped from all available sources and pass to the SEOC. Continue to identify locations where rescue needs to occur.
4. Task rescue missions to the specialized rescue teams through ESF-9.
5. Continue to request search and/or rescue missions as needed from the SEOC.
6. Continue to mark structures searched using the established FEMA protocol for marking and pass search information and damage information to the SEOC.

7. Provide area accessibility information to the SEOC to support S&R operations within the affected county(ies):
 - a. Ingress/egress.
 - b. Helicopter landing space.
 - c. Bridge and road safety.

State Mission-essential Tasks

Missouri Division of Fire Safety:

1. Continue to implement the ESF-9 information collection plan to gather essential elements of information:
 - a. Verify, analyze, and develop reports that provide current operating picture for the incident.
 - b. Provide situational awareness and deployment requirements for lifesaving response teams.
 - c. Post reports to the designated reporting system.
2. Prioritize key locations/activities that need S&R operations:
 - a. Rescue operations will be based on potential loss of life and accessibility of the area.
 - b. Specialized rescue teams will be tasked to areas based on priorities set by the SEOC.
3. Deploy necessary S&R teams and integrate into local S&R operations.
4. Continue to task inter-state and intra-state assets to support S&R operations in the affected area.
5. Provide objectives for incident action planning and priorities for the next operational period to field teams.

Missouri Department of Natural Resources, Missouri State Water Patrol, Missouri National Guard, Missouri Highway Patrol, and Civil Air Patrol:

1. Maintain air and water operations in support of S&R efforts.
2. Task air and water resources with S&R operations as applicable.

Missouri National Guard, Missouri Highway Patrol, and Civil Air Patrol:

Provide landing zones in the affected areas to the unified S&R teams through the State Air Operations Branch.

Federal Mission-essential Tasks

Federal Emergency Management Agency:

1. Activate the US&R Task Forces as applicable.
2. Establish command and control (IST) for US&R assets.
3. Disseminate National Geospatial Intelligence Agency (NGA) GIS products down to ground resources.
4. Execute the Federal Search and Rescue Response System, ensuring National Grid System and marking system identified are used by all federal S&R resources.

5. Activate support agencies for S&R (Army Corps of Engineers, U.S. Coast Guard, National Parks Service, and Department of Defense).

US Coast Guard:

1. Provide S&R operations for federal dam/levee failures as needed.
2. Integrate assets in support of S&R operations in accordance with the US National Search and Rescue Plan.
3. Provide guidance and coordination for water borne S&R operations. Provide waterborne S&R expertise and equipment as needed.

Department of the Interior/National Park Service:

Assist with S&R operations in the remote and rural areas.

Department of Defense/Corps of Engineers:

Provide structural specialists and System to Locate Survivors (STOLS) teams to assist with US&R operations.

Department of State:

Coordinate the use and employment of international S&R assets/resources if the level of response overwhelms the national capability.

3.1.2.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

Continue to identify and deploy search and rescue assets to the affected area as more areas become accessible to save as many lives as possible and begin recovery operations as needed.

End State of Phase

Complete search of the affected area, continue to mark structures and gather data for SEOC on persons in need of rescue, fatalities needed extraction or removal, unsafe structures, etc. Continue rescue operations as areas become accessible and transition to recovery operations as instructed or needed.

Local Mission-essential Tasks

1. Continue urban area search and wide area search missions as appropriate.
2. Identify locations where rescue or recovery needs to occur.
3. Continue to mark structures searched and provide search data to the SEOC.
4. Continue to request search and/or rescue assets as needed from the SEOC.
5. Begin demobilization planning.
6. Continue to provide information to the SEOC on:
 - a. Number of buildings searched.
 - b. Number of rescued individuals.
 - c. Number of fatalities.
 - d. Number of rescued companion animals.
 - e. Plan for and request personnel for ongoing operations.

State Mission-essential Tasks

Missouri Division of Fire Safety:

1. Monitor the status of active S&R mission assignments and determine movement of S&R resources from one operational area to another requiring assistance prior to demobilization.
2. Begin demobilization planning in coordination with the affected jurisdictions and other deployed S&R resources.
3. Continue to request search and/or rescue assets as needed.
4. Provide reports and information to senior leadership as requested.
5. Validate preliminary information and continue to gather and analyze information.
6. Provide data for situation reporting and incident action planning.

All Support Agencies:

Continue to provide mission support as needed.

Federal Mission-essential Tasks

Federal Emergency Management Agency:

1. Monitor the status of active S&R mission assignments and ensure state has coordinated release of S&R assets from one area to another before demobilizing.
2. The FEMA ISTs will work with FEMA Logistics on location of the S&R base camp and request sustainment as needed for these teams.
3. Continue to work through a Unified Command (UC) approach with federal/state/S&R teams to meet the objectives identified for operations.
4. Provide reports and information to senior leadership as requested.
5. Coordinate with ESF-6 for care of companion animals.
6. Coordinate with ESF-8 for the transfer and care of victims.

All Support Agencies:

Continue to deploy search and/or rescue assets as needed.

4.0 Oversight, Coordination and Communications

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Incident Command

4.1.2 State

- Missouri Division of Fire Safety, Office of the State Fire Marshal

4.1.3 Federal

- Department of Homeland Security/FEMA

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Law Enforcement
- Local Fire Department
- Local Emergency Medical
- Non-governmental Agencies
- CERT

4.2.2 State

- Missouri Department of Conservation
- Missouri Department of Corrections
- Missouri Department of Transportation
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri State Water Patrol
- Missouri National Guard
- Missouri State Highway Patrol
- Civil Air Patrol
- Missouri Voluntary Organizations Active in Disaster

4.2.3 Federal

- U.S. Coast Guard
- Department of the Interior/National Park Service
- Department of Defense
- Department of State

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The Emergency Management Assistance Compact (EMAC) offers state-to-state assistance during governor-declared state of emergency (receiving state). During a NMSZ incident, it is assumed that EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

- The Governor of Missouri will declare a disaster.

- SEMA will open an EMAC event in the EMAC Operations System.
- Missouri will request assets based on mission assignment.
- The assisting state will detail the available assets and estimated costs back to SEMA.
- SEMA will approve the resource and cost.
- The resource from the assisting state will mobilize and deploy.

For resources that are not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

Table C9-5 lists potential resources that may be requested for Missouri through the EMAC system from non-impacted states according to pre-incident agreement. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C9-5 Pre-scripted EMAC Requests

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	State US&R Teams	
	State Veterinarian Response Teams	
	S&R Teams (water and ground) Document Unit Team to support Finance and Administration State ISTs or IMATs	

5.2 Pre-scripted Requests for Federal Assistance

Table C9-6 lists potential resources that may be requested through the Federal Government via FEMA MAs. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C9-6 Pre-scripted Action Request Form

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Administrator	SEMA		National Placard System Team		
	Administrator	SEMA		Federal US&R		
	Administrator	SEMA		Federal Disaster Assistance Teams (USCG)		
	Administrator	SEMA		Federal GIS support from US Corps of Engineers		

6.0 Operational Tools

6.1 US National Grid Tutorial

US National Grid (USNG) Coordinates: *World wide context.*

Information Sheet 2/1 in this series.

FGDC-STD-011-2001

From www.fgdc.gov/usng

The example below locates the Jefferson Pier at USNG: 18S UJ 23371 06519.

U.S. National Grid
100,000-m Square ID
UJ
43 00
UH
Grid Zone Designation
18S

A USNG value has three components.

Some maps may give this leading information in a grid reference box.

Grid Zone Designation (GZD):

6° x 8° longitude zone / latitude band.

100,000-m Square Identification:

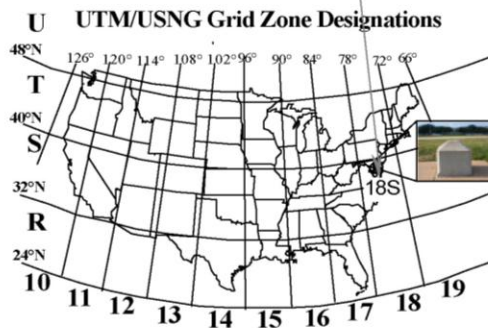
18S UJ 2337 0651

Grid Coordinates:

Read right, then up.

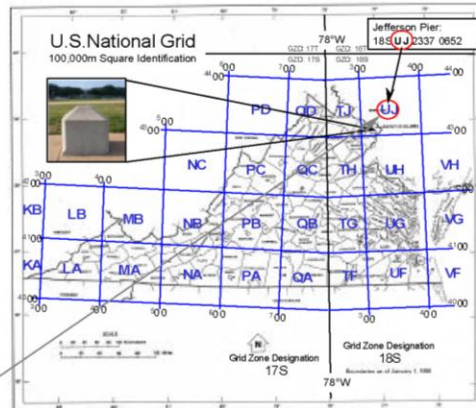
“Read right, then up.”

USNG values have three components as seen above. The Grid Zone Designation gives a USNG value world-wide context with 60 longitudinal zones each 6° wide. Zones 10 - 19 cover the conterminous U.S. as seen below left. UTM zones are divided into 8° latitudinal bands. Together these 6° zones and 8° bands compose Grid Zone Designations. Example: 18S



100,000-m Square Identifications
Example: UJ

GZDs are further subdivided into 100-km x 100-km squares with 100,000-m Square Identifications. In this example, the Jefferson Pier is located in UJ. These squares are organized and lettered so they do not repeat themselves but every 18°, which is approximately 1,000 miles in the mid-latitudes. The illustration at right depicts how far one must go before the letters UJ repeat. In the conterminous U.S. this ensures a given value such as UJ 2337 0651 is unique out of the entire state it is located in - as well as all surrounding states.



The Power of Truncated USNG Values

Jefferson Pier, Washington, DC
Grid: UJ23370651



Each 2 letter/8 digit USNG value
(10-m posting) in the outlined area is unique.

In general, people in a local community may use the grid coordinates alone - for example: 233 065. The same numbers recurs about every 60 miles but normally that will not cause a problem when the general location is understood. This is similar to the way you tell someone only the last digits of a phone number when the area code is obvious. If there is a possibility of confusion include the letter pair also - for example: UJ 233 065. A letter pair recurs about every 1000 miles so even in a disaster relief effort there should be no other point with those coordinates nearby. A complete USNG reference such as 18S UJ 233 065 is nationally and globally unique. Typically a GPS receiver or other electronic device requires a complete USNG reference since unlike a human it does not intuitively understand the general location from context. You should always give a complete USNG reference whenever abbreviated coordinates might not be clear or when listing them on letterhead, a business card or advertisement.

Reading US National Grid (USNG) Coordinates: “Read right, then up.”

Information Sheet 2/2 in this series.

FGDC-STD-011-2001

From www.fgdc.gov/usng

The example below locates the Jefferson Pier at USNG: 18S UJ 23371 06519.

U.S. National Grid	
100,000-m Square ID	
UJ	43 00
UH	
Grid Zone Designation	
18S	

A USNG value has three components.

Some maps may give this leading information in a grid reference box.

Grid Zone Designation (GZD):

6° x 8° longitude zone / latitude band.

100,000-m Square Identification:

18S UJ 2337 0651

Grid Coordinates:

Read right, then up.

“Read right, then up.”

- Grid lines are identified by **Principal Digits**. Ignore the small superscript numbers like those in the lower left corner of this map.

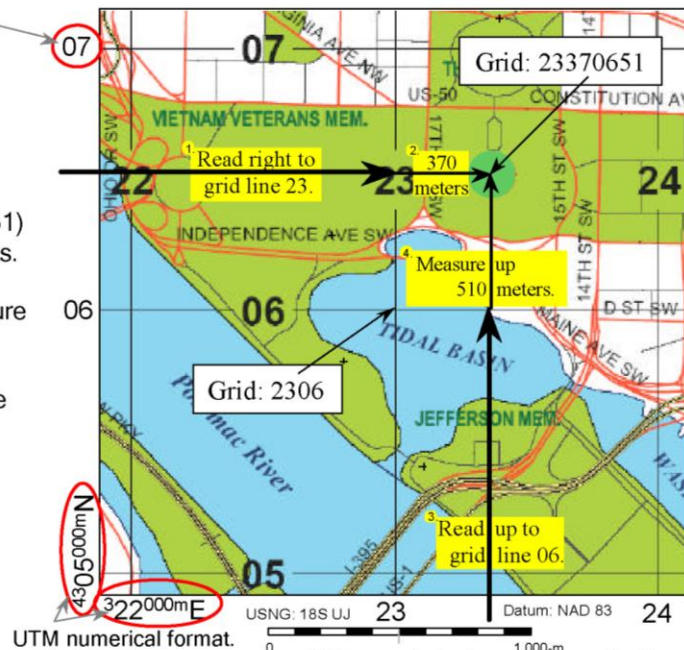
Reading USNG Grid Coordinates.

- Coordinates are always given as an even number of digits (i.e. 23370651).
- Separate coordinates in half (2337 0651) into the easting and northing components.

1. Read right to grid line 23. 2. Then measure right another 370 meters. (Think 23.37)

3. Read up to grid line 06. 4. Then measure up another 510 meters. (Think 06.51)

Grid:	Point of Interest:
228058	FDR Memorial: +
231054	George Mason Memorial: +
2338 0710	Zero Milestone: +
2275 0628	DC War Memorial: +
222065	Lincoln Memorial:



Ignore the small UTM superscript numbers that are provided for reference purposes. UTM numerical values are best suited for determining direction and distance as in surveying. USNG alpha-numeric values are best suited for position referencing because they can be given as only grid coordinates in a local area and with only the required precision for a particular task.

Users determine the required precision. These values represent a point position (southwest corner) for an area of refinement.	Four digits:	23 06	Locating a point within a 1,000-m square.
	Six digits:	233 065	Locating a point within a 100-m square (football field size).
	Eight digits:	2337 0651	Locating a point within a 10-m square (modest size home).
	Ten digits:	23371 06519	Locating a point within a 1-m square (man hole size).

A modest size home can be found or identified in a local area with only an 8-digit grid.

Complete USNG value: 18S UJ 2337 0651 - Globally unique.

Without Grid Zone Designation (GZD): UJ 2337 0651 - Regional areas.

Without GZD and 100,000-m Square ID: 2337 0651 - Local areas.

This illustrates how nationally consistent USNG coordinates are optimized for local applications. They serve as a universal map index value in a phone or incident directory for field operation locations. Unlike classic atlas grids (i.e. B3), these can be used with any paper map or atlas depicting the national grid and in web map portals such as the Washington, DC GIS (<http://dcgis.dc.gov>).

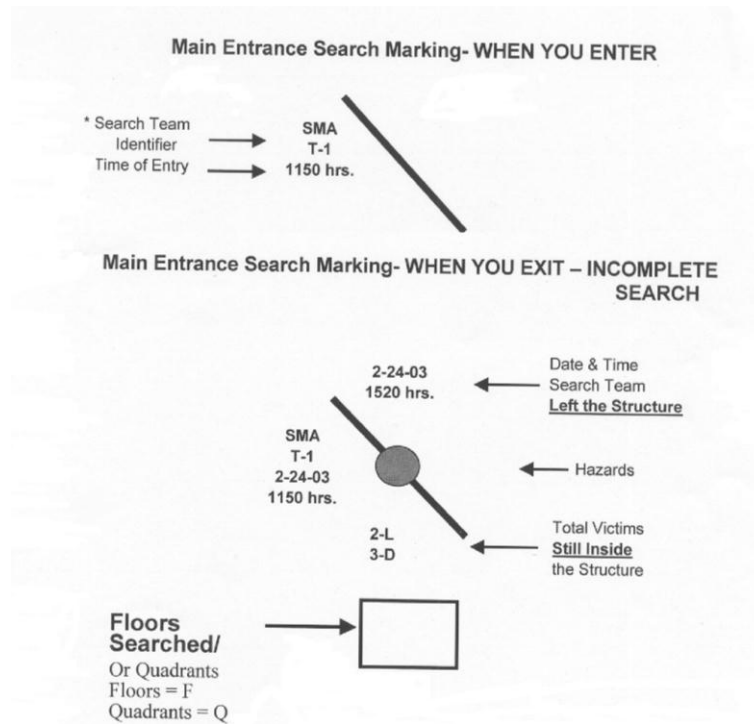
They can also be used in consumer GPS receivers to directly guide you to the location. This is especially beneficial at night, in heavy traffic, or major disasters when street signs are missing.



Point of Interest	Street Address	USNG Grid:	Telephone:
Subway Sandwich & Salads	2030 M St., NW	18S UJ 2256 0826	(202) 223-2587
Subway Sandwich & Salads	430 8th St., SE	2698 0567	547-8200
Subway Sandwich & Salads	3504 12th St., NE	2740 1120	526-5999
Subway Sandwich & Salads	1500 Benning Rd, NE	2815 0757	388-0421

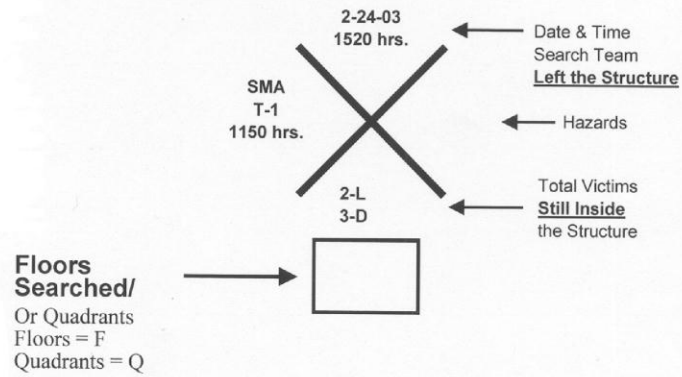
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6.2 Search Markings



Main Entrance Search Marking

WHEN YOU EXIT— COMPLETED SEARCH

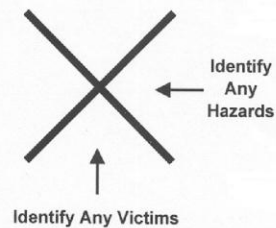


Interior Search Markings- EACH ROOM OR AREA

WHEN YOU ENTER

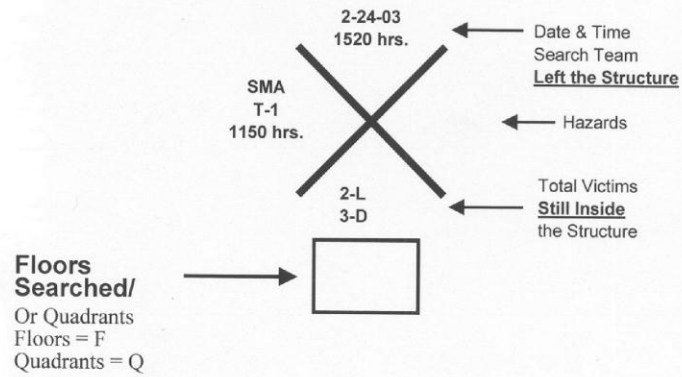


WHEN YOU EXIT



Main Entrance Search Marking

WHEN YOU EXIT— COMPLETED SEARCH

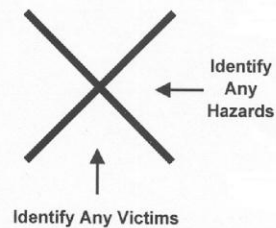


Interior Search Markings- EACH ROOM OR AREA

WHEN YOU ENTER

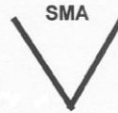


WHEN YOU EXIT

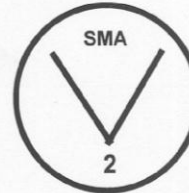


US&R VICTIM MARKING SYSTEM

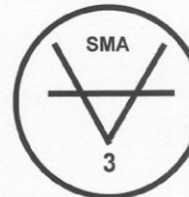
Make a large (2' x 2') "V" with orange spray paint near the location of a potential victim. Mark the name of the search team or crew identifier in the top part of the "V" with paint or a lumber marker type device.



Paint a circle around the "V" when a potential victim is confirmed to be alive either visually, vocally, or hearing specific sounds that would indicate a high probability of a live victim. If more than one confirmed live victim, mark the total number of victims under the "V".



Paint a horizontal line through the middle of the "V" when a confirmed victim is determined to be deceased. If more than one confirmed deceased victim, mark the total number of victims under the "V". Use both the live and deceased victim marking symbols when a combination of live and deceased victims are determined to be in the same location.



Paint an "X" through the confirmed victim symbol after the all victim(s) have been removed from the specific location identified by the marking.



An arrow may need to be painted next to the "V" pointing towards the victim when the victim's location is not immediately near where the "V" is painted. Show distance on arrow.



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**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C10
ESF-10 – Hazardous Materials Response**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

The ESF-10, Hazardous Materials, Appendix to Annex C to the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for supporting local and state hazardous materials (hazmat) response following a catastrophic earthquake in the State of Missouri.

Under to the Missouri State Emergency Operations Plan (SEOP) the Missouri Department of Natural Resources (MDNR) is the primary agency for hazardous material operations.

Under the National Response Framework (NRF) the United States Environmental Protection Agency (EPA) is designated as Coordinator and Primary Agency for ESF-10. Federal Emergency Management Agency (FEMA), U.S. Department of Agriculture (USDA), and other federal support agencies will employ ESF-10 hazardous material support when activated to support the State of Missouri in disaster response.

While the Mid-America Earthquake Center (MAE) Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire state including the 47 counties recognized by the state as having a high potential to be negatively impacted by a seismic incident. This Plan also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties or the effects of after shocks are provided unless denoted.

According to modeling data from the MAE Center, a NMSZ earthquake is expected to have direct impact on 22 Missouri counties and the City of St. Louis. They estimate that there are 3,040 hazardous materials facilities in Missouri and during a NMSZ event of 7.7 magnitude 32 of those facilities will be completely damaged. This data is not inclusive of hospitals, schools, and other facilities that maintain small amounts of hazardous materials onsite. Table C10-1 shows an estimate of the site damage for hazardous materials facilities.

Table C10-1 Hazardous Material Site Damage Estimates

Facility	Partially damaged	Completely damaged
Natural Gas	354	64
Oil	167	7
Natural Gas	66,400	30,928
Hazardous Materials	3,040	32

Over 14,000 different chemicals are estimated to be shipped by the various transportation modes in Missouri. The Interstate corridors of I-44, I-70 and I-55 are the most commonly used for truck transport. U.S. Highway 36 crosses the northern counties, while U.S. 60 crosses the southern counties. U.S. Highways 71, 13, 65, and 63 are also well-traveled north-south arterial routes. Missouri is at the crossroads for rail and truck transport of nuclear waste to the Yucca Mountain, Nevada, test site. Also, the locations of nuclear facilities in relation to mines and fuel processing plants result in shipments of radioactive products and wastes across Missouri.¹

Although railroads are throughout Missouri, the Union Pacific (UP) route between St. Louis and Kansas City is the most used for large radioactive material shipments. However, the Norfolk Southern from Hannibal to Kansas City has been and is the preferred route for rail transportation of radioactive material.

¹Missouri State Emergency Management Agency (SEMA). 2009. State Emergency Operations Plan, Annex K, Hazardous Materials, October 2009.

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The switching yards at St. Louis and Kansas City, when combined, process more of these transcontinental trains than any other yards in the country. The railroad systems in Missouri transport voluminous types and amounts of hazmat on their 6,351 miles of rails that transverse the state.²

The U.S. Army Corps of Engineers (USACE) indicates over 9,000 tons of petroleum products and 200,000 tons of chemicals and related products are shipped annually by river barge via the Missouri River between Omaha and Kansas City. About 20 flights each day out of Lambert Airport in St. Louis carry nuclear medicines.³

A large number of hazardous material shipments come from two Missouri corporations, Covidian Medical in Maryland Heights (St. Louis County) and Tri-State Motor Transit in Joplin (Jasper County). Covidian Medical is one of the largest manufacturers of radiopharmaceuticals in the world. Tri-State is one of the largest private carriers of radioactive materials in the world, in addition to transporting all classes of explosive materials and other toxic and hazmat classes. Tri-State Motor Transit Company of Joplin has approximately 25 shipments of high explosives each week.⁴

According to the MAE Center Data there are 8,622 miles of natural gas pipelines in Missouri, 6,400 miles of crude oil pipeline, and additional pipeline for liquid petroleum gas/natural gas and refined gas product. In addition there is a NuStar anhydrous ammonia pipeline that runs through the St. Louis area.

Tier II Forms are filed and maintained by the Missouri Emergency Response Commission (MERC) and site-specific plans are on file with each county's Local Emergency Planning Committee (LEPC).

Hazardous materials incidents could be widespread events related to the earthquake. Local first responders will initiate lifesaving activities, but it is anticipated there will be an immediate need for an increase in hazmat resources; state and federal resources will be required for decontamination, spill containment, and cleanup. The following table (C10-2) shows the estimated support requirements needed for potential hazardous material incidents following an earthquake according to the Missouri State Fire Marshall's Office.

Table C10-2 Hazardous Material Resource Estimates

Resource	Description	Total Requirement	Provided through statewide fire mutual aid	Support Requirement
ESF 10 Coordinator	State Representative for SEOC	6	6	0
Type I HazMat Teams	Level A Entry WMD/CBRN	9	3	6
Type II HazMat Teams	Level B Splash Protection	32	23	9
Type III HazMat Teams	Level C Known Chemicals	32	3	29
Decontamination/Support	Level D	23	0	23

² Missouri State Emergency Management Agency (SEMA). 2009. State Emergency Operations Plan, Annex K, Hazardous Materials, October 2009.

³ Missouri State Emergency Management Agency (SEMA). 2009. State Emergency Operations Plan, Annex K, Hazardous Materials, October 2009.

⁴ Missouri State Emergency Management Agency (SEMA). 2009. State Emergency Operations Plan, Annex K, Hazardous Materials, October 2009.

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Resource	Description	Total Requirement	Provided through statewide fire mutual aid	Support Requirement
Private Industry Liaisons	23 SOSC hazmat technicians that can assess and initiate cleanup	23	23	0
HazMat Clean up/ remediation companies	Conduct site clean up	32	4	28

The following figures indicate where potential hazardous materials incidents may occur during a catastrophic earthquake. These sites include toxic release inventory sites, pipelines, biodiesel, and natural gas storage locations.

Figure C10-1 Pipelines and Pipeline Interconnects – REDACTED

Figure C10-2 Toxic Release Sites – REDACTED

Figure C10-3 Biodiesel Plants – REDACTED

Figure C10-4 Natural Gas Storage – REDACTED

Figure C10-5 Oil and Gas Facilities – REDACTED

All large scale evacuations will be overseen by the Evacuation Management Team (EMT) from the SEOC. The EMT is a multidisciplinary team which can support the evacuation efforts, make recommendations to the Unified Command, and coordinate with local jurisdictions. The composition of the EMT is listed in Table C10-3. The EMT will be actively engaged in assessing the impact to jurisdictions and developing a course of action for conducting evacuation operations.

Table C10-3, Evacuation Management Team Composition

Agency Represented	ESF-#
Department of Public Safety	ESF-13
Public Information Officer	ESF-15
State Emergency Management Agency	ESF-5
Department of Natural Resources	ESF-10
Missouri Department of Transportation	ESF-1
Voluntary Organizations Active in Disaster	ESF-6
Department of Social Services	ESF-6
Department of Health and Senior Services	ESF-8
Missouri State Highway Patrol	ESF-13
National Guard	N/A
Department of Mental Health	ESF-6

Localized evacuation will be the responsibility of the local jurisdiction. Once a regional evacuation has been implemented by the EMT, the overall concept of operations is outlined in the ESF-6 Appendix to this plan. Throughout this process, the EMT and the Local EMDs will coordinate the efficient deployment of resources, utilization of available evacuee shelter capacity, and effectively address modifications to evacuation routes.

1.1 Purpose

The purpose of this Appendix is to provide ESF-specific information for the OPLAN. The ESF-10 Appendix details the ESF's limitations, organization, and course of action to execute the roles and responsibilities assigned to the ESF during a New Madrid Seismic incident. The OPLAN Appendix identifies roles and responsibilities, enhancing unity of effort, and links existing plans. Specifically, this Appendix provides the ESF-10 Coordinator with the basis for evaluating and accepting or redirecting mission assignments and tasks received from the state and/or FEMA in response to an earthquake event in the NMSZ.

Objective: Conduct hazardous material response and firefighting operations

1.2 Considerations

- Fire, hazmat, search and rescue (S&R), and emergency medical system (EMS) operations pull from the same pool of resources.
- The State of Missouri is a shipping hub for hazardous materials in the Midwestern United States.
- Numerous fixed facilities throughout the state transport, treat, use, manufacture, or store hazmat. The MERC maintains a list of facilities reporting on Tier II forms.
- Six major highways, 15 railroads, and numerous secondary highways traverse the state.
- Barges transport materials on the major rivers of Missouri within the state and from other river ports such as New Orleans, Pittsburgh, and Louisville.
- Networks of natural gas pipelines, crude oil pipelines, and bulk product pipelines are located throughout the state.
- Sixty-four rivers and streams making up over 10,000 miles of waterways of all sizes are in Missouri. They range from the Missouri and Mississippi rivers to small rivers that only flow through one or two counties. Missouri also has numerous lakes and reservoirs. Since many transportation routes are adjacent to, or on floodplains, a transportation incident involving hazmat could result in rapid chemical runoff into area waterways.
- Many chemical manufacturing operations and transportation corridors are adjacent to large populations.
- Major and minor hazmat spills are likely to result from the impact of the earthquake. These events will be prioritized based upon several factors, including but not limited to, toxicity of the released materials, population threatened, media impacted (air, land, water) with life safety being given top priority.
- State and local hazmat response teams and resources will need to be augmented by federal and private resources. It is expected that first responders who serve in dual roles within their community may not be readily available to respond to hazmat events especially within the affected areas.
- The earthquake will result in secondary hazmat incidents due to:
 - Damage to shipping, storage, and refining facilities for petroleum products

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- Failure of pipelines
 - Damage to manufacturing, storage, shipping, and research facilities associated with chemical, biological, and radiological materials
 - Transportation accidents
 - Additionally, damage to buildings and other structures will result in dislodging of asbestos and other hazmat, as well as disposal issues related to household hazardous waste and other contents that will require special procedures for handling and disposal.
- Due to ground shaking and the potential for liquefaction there is a potential for hazardous material releases and spills. In the affected area (as described in MAE Center Data) there will be 3,040 hazardous material facilities damaged, 32 completely damaged. This includes 354 natural gas facilities, 167 oil facilities and 7,816 wastewater facilities potentially damaged. Priorities will be as follows:
 - Life safety
 - Identification and control of hazardous material releases and spills
 - Development of a common operating picture
 - Assessment
 - Transportation of resources
 - Establishment of communications
 - Restoration of local capabilities
 - Safety monitoring for first responders
- Prioritization of calls and responses will be required. Matching resource type to incidents where they can provide the most benefit will occur, with lower priority calls not being immediately addressed. Additionally, the type of incident and security considerations will also influence decision making when triaging a particular emergency release.

1.3 Assumptions

- Local and regional hazmat resources will likely be engaged with S&R, firefighting, and EMS activities and the capacity for addressing hazmat will be limited. Hazardous material releases will be prioritized according to life safety.
- Outside assistance (federal, state, or other local jurisdictions) will be requested when required.
- Hazardous materials response teams may be available outside the immediately affected jurisdiction through state fire mutual aid (local and regional), state EMAC agreements and/or state on-scene coordinators (SOSC) with response contractors, or federal on-scene coordinators (FOSC) with response contractors.
- Hazmat decontamination priorities and clean up will be established using the following priorities in order of importance: life safety, incident stabilization, and preservation of property and the environment.
- Hazmat transportation accidents will occur on the highway system, rail system and river network and pipelines.
- In-state mutual aid resources (local and state levels) will arrive within 8 hours.

- State, federal and other hazardous material assets such as private response contractors will augment local assets; Missouri National Guard (MONG) including the Civil Support Team (CST) and DOD may also be activated to augment local assets. Specialty resources will be reserved for hazmat incidents which could have a large impact on public safety and potential loss of life.

1.4 Limiting Factors

- Resources will be severely affected; it is estimated in MAE Center Data that 114 fire stations and associated equipment may be damaged and possibly destroyed in the affected areas.
- Personnel may have an absentee rate of up to 40% following the incident⁵, and they may not be able to communicate with their respective fire agency. On-duty personnel will have immediate concerns for their family and property, especially if communication lines are down. Roads may be blocked or impassible; damage to personal property and injuries may affect the ability to report to work.
- Secondary damage to equipment, such as flat tires from debris, may render some equipment unavailable or require repeated repairs, and the availability of supplies and parts for these repairs may be limited.
- Damaged underground storage tanks and natural gas wells may further impede first responder response efforts.
- Detailed information on all hazmat facilities within the NMSZ may not be readily available to first responders.
- Power failures will hamper dispatching, response, and staff support.
- There is no uniform system in place to provide access control at perimeters, including credentialing and access verification for first responders.
- There may be limited aircraft available to move teams, supplies, and commodities to the disaster area.
- Weather may inhibit the restoration of the logistics infrastructure.
- It will take time to deploy resources (state and federal) into the affected areas.

2.0 Mission

Local, state and federal partners will coordinate to assess and respond to hazardous material spills or releases based on life sustainment and accessibility of the area immediately following a catastrophic earthquake.

The mission of hazmat operations following an earthquake disaster is to provide for a coordinated response by local, state and federal resources to minimize the adverse effects on the population and the environment resulting from the release of, or exposure to, hazardous materials. MDNR is responsible for situational awareness, prioritization, and coordination of hazmat response efforts.

Federal ESF-10 Oil and Hazardous Materials Response provides federal support in response to an actual or potential discharge and/or uncontrolled release of oil or hazmat when activated. Response to oil and

⁵ This information was taken from several publications about Continuity of Operations and Continuity of Government. The number is derived from several studies of business during and after large scale disasters such as Hurricane Katrina.

hazmat incidents is generally carried out in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300.

ESF-10 is applicable to all federal departments and agencies with responsibilities and assets to support local and state response to actual or potential oil or hazmat incidents. During a Stafford Act incident, Stafford Act funding will be used to address oil and hazmat incidents that are not at pre-existing sites under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or Federal Water Pollution Control Act (FWPCA), for which federal assistance is requested.

Priority will be given to 1) life safety (firefighters and the public), and 2) protecting property and the environment, in that order.

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases of response within specified periods of time. A description of these Phases is in Section 3.3 of Annex C – Operations. Table C10-4 lists the (sub) phases of Phase 2 (Phases 2a, 2b, and 2c).

Table C10-4 Response Phase Operational Periods

Response Phase	Operational Period
2a – Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Employment/Sustained Response	E + 72 – E + 120 hrs +

The phases of response and operation are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

3.1.1 General Concepts

In general, priorities for hazmat response are as follows:

- Immediate life safety
- Assess hazardous material releases and spills and control those that provide immediate threat to life safety
- Development of a common operating picture and establishment of command structure according to ICS
- Transportation of resources
- Establishment of communications
- Restoration of local capabilities.

During the aerial damage assessments, obvious problems such as fires at industrial complexes and petroleum in rivers will be identified.

The initial hazardous material response will be a local effort, with priorities set by local government. Immediate resource support for hazmat response will be provided by Missouri's fire mutual aid resources, through coordination with MDFS. Local fire-based resources are capable of responding to a hazardous material incident through the Missouri Fire Mutual Aid provisions (RSMo Chapter 44). The MDFS through its Statewide Fire Mutual Aid System will support response efforts. Both the EPA and U.S.

Coast Guard (USCG) can respond under their own authorities but will coordinate incident-wide actions through ESF-10 at the SEOC. Close coordination will be maintained between local, state and federal officials to establish priorities for hazmat response support. USCG, EPA and their private contractors will provide assistance in response and cleanup efforts in coordination with local and state agencies.

MDNR will deploy Environmental Emergency Response State On-Scene Coordinators (SOSC) to assess the hazmat situation and provide technical assistance as soon as possible. To prioritize response efforts, an assessment will include the nature, amount, and locations of real or potential releases of hazmat, pathways to human and environment exposure, probable direction and time of travel of the materials, potential impact on human health, welfare, safety, and the environment.

The local Incident Commander (IC) should prepare for the following response times for hazmat response resources:

- Local response time 0 – 2 hours
- Intra-State response time 2 – 17 hours
- Inter-State response time 12 – 24 hours
- Federal response time 24+ hours

3.1.2 Phased Response Concepts

3.1.2.1 Phase 2a: Immediate Response

Purpose of Phase

Gain situational awareness of hazardous material incident response at the local level and bring them into a coordinated response effort.

End State of Phase

Development of a common operating picture and implementation of a coordinated response effort for hazardous material incidents in the affected area giving priority to life saving measures.

Local Mission-essential Tasks

The local IC will initiate hazmat activities using available resources. Resources that will be needed for hazmat response may be tasked in S&R operations and therefore, not be available for immediate response. Mutual aid agreements exist within the state between municipalities, counties, and fire protection districts. Mutual aid agreements provide the mechanism for one local agency to assist another during an emergency. The local IC will be required to prioritize hazmat incidents, fires and S&R activities and access any local mutual aid agreements for support until state and federal assets can be acquired to assist. The specific ESF-10 tasks to be accomplished by local agencies are listed below:

1. Initiate hazardous material plans that include possible evacuation, area control, and clean up as needed.
2. Work with facility operators to perform the initial assessment of hazardous material releases.
3. Implement appropriate emergency operations and ensure that the personal protective equipment worn is appropriate for the hazards to be encountered.
4. Ensure basic life support personnel are standing by with medical equipment and transportation capability as requested.
5. Implement appropriate decontamination procedures as requested.
6. Notify the SEOC of the local ICS structure and who is serving as the local IC.

7. Prepare for an influx of first responders.
8. Mobilize local and hazmat assets
 - a. Perform missions as tasked by the local IC.
9. Gather information about:
 - a. Damaged hazmat assets in the local jurisdiction
 - b. Approximate number and types of hazmat incidents
 - c. Initial prioritization of hazmat releases to address
 - d. Pass all information to the SEOC.
10. Alert key personnel according to departmental procedures.
11. Determine the status of equipment and resources- check the status of supplies and provide reports with projected needs for the next operational period to the SEOC.
12. Alert or activate off-duty and auxiliary personnel as required.
13. Provide operational priorities and rules of engagement to field teams.
14. Relay damage reports and advanced warning of all potential problem areas to the SEOC.

State Mission-essential Tasks

MDFS coordinates a Statewide Fire Mutual Aid System; under this system, hazmat resources from jurisdictions throughout Missouri will respond to the earthquake. This system enhances the ability of volunteer or career fire departments to handle major hazmat incidents within their jurisdictions. To compliment the Statewide Fire Mutual Aid System, an incident support team (IST) concept has been developed in regions of the state. An IST may be deployed to provide support at the local level in the impacted area to assist with coordination of hazardous material response. Hazmat operations will be tasked out to available local, state or federal resources on an as-needed basis. Hazmat incidents that pose an immediate threat to life will be considered the highest priority for mission assignment.

MDNR is the lead agency for hazardous material response in Missouri. The MDNR will coordinate all activities regarding response and recovery pertaining to a hazmat release or radiological release.

Responsibilities of state agencies are described in the Missouri SEOP, Annex N (Hazardous Materials). The specific tasks to be accomplished by state agencies are listed below:

Missouri Department of Natural Resources:

1. Work with local agencies in supporting on-scene management for hazmat material response.
2. Evaluate requests for assistance from local agencies and forward to the SEOC.
3. Activate state radiological plans for any radiological release or emergency.
4. Coordinate with ESF-9, S&R, for ongoing hazmat support at rescue sites.
5. Coordinate ESF-10 in the SEOC. Immediate resource support for hazmat response will be provided by Missouri's hazmat teams, through coordination with DFS and MDNR resources. Close coordination will be maintained between local, state and federal officials to establish priorities.
6. Deploy MDNR Environmental Emergency Response (EER) State On-Scene Coordinator (SOSC) to the affected areas to assess the hazmat situation and provide technical assistance as soon as possible. In order to prioritize response efforts, an assessment will include:

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- a. Nature
 - b. Amount
 - c. Locale of release
 - d. Pathways to human and environmental exposure
 - e. Probable direction and time of travel of the materials
 - f. Potential impact on human health, welfare, safety and the environment.
7. Request aerial assets to assess damage to industrial complexes and large hazmat release threat areas.
8. Send hazardous material representatives to the SEOC for ESF-10 and begin coordination with the local IC.
9. Coordinate activities with other agencies.
10. Coordinate with MDFS for the activation of the Statewide Fire Mutual Aid System
11. Support the coordination of technical, administrative support, personnel, facilities, communications, and information.
12. Determine resource requirements and process appropriate pre-scripted EMAC requests. Coordinate with ESF-1 and ESF-7 to move mission assigned assets and overhead personnel to staging areas, established bases, or directly to the incidents as applicable.
13. Coordinate with ESF-7 to ensure logistical needs are established for hazmat operations and support.
14. Coordinate the integration of intra-state, inter-state and federal resources into the local incident command structure.
15. Implement an ESF-10 information collection plan to gather essential elements of information.
16. Coordinate with the local IC to provide operational priorities and rules of engagement to field teams.
17. Obtain information from local fire agencies or individual companies and conduct reconnaissance to determine overall post-event hazmat capabilities left operational within the affected areas:
 - a. Post-event response capability
 - b. Number and severity of incidents

Missouri Division of Fire Safety, Office of the Fire Marshal:

Coordinate the State Fire Mutual Aid System and assist with the coordination of fire mutual aid resources in the affected area.

Missouri Department of Public Safety:

Assist with the coordination of mutual-aid, provide for mutual-aid resources outside of the state.

Missouri Department of Transportation:

1. Provide resource support for spill control measures on roadways as needed including heavy equipment, dirt, sand, traffic control barriers and other assistance.
2. Coordinate with ESF-1 and Air Ops on selected routes to enable hazmat equipment to reach incidents or assigned reporting locations.

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3. Coordinate with ESF-2 to ensure communication frequencies are available for hazmat operations (command, tactical, logistical).

Missouri State Highway Patrol:

1. Coordinate security issues for hazmat operations and support activities as requested.
2. Provide perimeter security in and around hazmat incidents as capability allows and as requested.

Missouri National Guard:

1. Support reconnaissance and response asset movement as available.
2. Employ Civil Support Team (CST) and CBRNE Emergency Response Force Package (CERFP) as requested.
3. Request additional (other states) National Guard assets, including additional CSTs, CERFPs to expand/sustain MONG capabilities as requested.

Missouri State Water Patrol:

Coordinate hazardous material response in waterways with the USCG.

Missouri State Emergency Management Agency:

1. Support the Missouri Fire Mutual Aid System.
2. Coordinate with FEMA and other state agencies for hazmat assistance.

Missouri Department of Agriculture:

1. Coordinate with MDNR for any needed sampling assistance for livestock, farm animals, crops, pets in the contaminated areas.
2. Coordinate with MDNR for the proper decontamination of farmland, farm animals, crops, and pets and proper disposal of contaminated animal carcasses.

Missouri Department of Health and Senior Services:

1. Coordinate with ESF- 15 to develop emergency public information concerning hazmat releases and public health.
2. Provide radiation protection advisories if necessary.
3. Coordinate any responses to radiological incidents with MDNR and the local IC.

Federal Mission-essential Tasks

The EPA serves as the lead for ESF-10, Oil and Hazardous Materials Response, which provides for a coordinated response to oil and hazmat incidents by using the response mechanisms set forth in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP is the federal government's blueprint for responding to both oil spills and hazardous substance releases.

The ESF-10 specific tasks to be performed by federal agencies are listed below:

Environmental Protection Agency:

1. Establish internal reporting through the EPA On-Scene Coordinator Web Portal www.epaosc.org.
2. Send ESF-10 liaison to the SEOC.
3. Activate assets through the RRCC in advance of state requests if possible and deploy assets to the federal staging areas.

4. Coordinate federal resources through the RRCC.

Federal Emergency Management Agency:

1. Assist with the coordination of USCG, the EPA, and private contractors during response to hazmat releases.
2. Provide and receive reports and updates as required from various agencies (local, state, and federal)
 - a. Damaged hazmat assets in the local jurisdiction
 - b. Approximate number and type of hazmat incidents
3. Identify communications requirements and capabilities.
4. Work with other federal agencies to determine what they are doing under their own authorities and report to the RRCC for a common operating picture.

3.1.2.2 Phase 2b: Deployment

Purpose of Phase

Conduct hazmat response missions to minimize the loss of life, damage to property and to stabilize the incident.

End State of Phase

Local, state and federal partners have implemented a coordinated response to hazardous material response prioritizing life saving measures.

Local Mission-essential Tasks

1. Assess the need for additional assets and request them from the SEOC.
2. Continue to provide situation updates and damage assessment data to the SEOC.
3. Anticipate the capabilities required to respond to regular hazmat calls and make requests to the SEOC as appropriate to maintain ongoing staffing.

State Mission-essential Tasks

Missouri Department of Natural Resources:

1. Coordinate requests for inter-state and federal hazmat assistance with SEMA.
2. Coordinate with FEMA and EPA in deploying the USCG National Strike Force. A highly trained, experienced group of personnel and specialized equipment from the USCG and other federal agencies that facilitate preparedness for and response to oil and hazardous substance pollution incidents in order to protect public health and the environment.
3. Coordinate with ESF-8 to determine the need for push packages, CHEMPACK, and decontamination equipment as requested.
4. Liaison with representatives from hazardous material industries in the affected area (refineries, pipelines, railroads, etc.).
5. Based on available resources, prioritize hazardous material operations.
6. Provide JIC with updated media briefings regarding hazardous material incidents and personal health precautions.

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7. Provide objectives for incident action planning and priorities for the next operational period to the planning section and to the field teams.
8. Determine how long local responders can maintain operations and send additional assets to relieve local responders.
9. Determine immediate and critical communications gaps, and deploy necessary communications equipment in coordination with ESF-2.

Missouri Division of Fire Safety

1. Coordinate mutual aid support of the incident.
2. Coordinate with MDNR for requests for inter-state and federal hazmat assistance.
3. Coordinate with MDNR to update the JIC with hazmat-related public information messages regarding fires, gas leaks, etc.
4. Begin assimilating information for the re-establishment of damaged or destroyed fire facilities.

Federal Mission-essential Tasks

Environmental Protection Agency:

1. Maintains close coordination between EPA Headquarters and USCG (as appropriate), the District Response Group (DRG), the RRCC, other ESFs, the National Response Team (NRT), and the state.
2. Coordinates, the overall federal effort to detect, identify, contain, decontaminate, clean up, dispose or minimize discharges of oil or releases of hazmat, or prevent, mitigate, or minimize the threat of potential releases.
3. Provides expertise on the environmental effects of oil discharges or releases of hazmat and environmental pollution control techniques as requested.
4. Manage EPA special teams under the NCP, including the Environmental Response Team, National Decontamination Team, and Radiological Emergency Response Team if deployed.
5. Provide technical assistance and advice in the event of fires involving hazmat.

Federal Emergency Management Agency:

1. Continue to conduct joint assessments to determine priority of deployments.
2. Employ federal assets for ESF-10 from federal staging areas as needed in coordination with the SEOC.

Department of Agriculture:

Provide technical assistance in the disposition of livestock and poultry contaminated with hazmat (ESF-11, Agriculture and Natural Resources maintain the lead for disposition of disease-contaminated livestock and poultry).

National Oceanic and Atmospheric Administration:

1. Provide operational weather data and prepare forecasts tailored to support the response, through the Interagency Modeling and Atmospheric Assessment Center (IMAAC).
2. Predict pollutant fate, effects, and transport as a function of time when requested.

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3. Provide weather forecasting as needed from the National Interagency Fire Center (NIFC) or from the National Weather Service Forecast Office in Kansas City, Springfield or St. Louis, MO under the terms of existing interagency agreements.
4. Provide forecasts of the dispersion of hazardous material plumes in support of planning and response activities.

US Army Corps of Engineers:

Provide assistance for contaminated debris, including chemical, biological, radiological, and nuclear contamination as requested.

Department of Health and Human Services:

1. Provide assistance on all matters related to the assessment of health hazards at a response and protection of response workers and the public health.
2. Determine whether illnesses, diseases, or complaints may be attributable to exposure to a hazardous material and provide recommendations for personal protective equipment.
3. Develop, maintain, and provide information on the health effects of toxic substances related to the incident.
4. Coordinate with EPA and USDA to ensure the proper disposal of contaminated food or animal feed.

Occupational Safety and Health Administration:

Provide technical support to EPA, DHS/USCG, and other NRT/RRT agencies, as well as to the OSC, regarding hazards to workers engaged in response activities.

Department of Transportation:

As requested, issues Special Permits to facilitate movement of hazmat, hazardous waste, and hazardous debris in support of response and recovery efforts.

3.1.2.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

Continue to identify and deploy hazardous material assets to the affected area as more areas become accessible with priority given to life safety, preservation of property, and stabilization of the incident.

End State of Phase

Stabilization of the incident and transition of hazmat response capabilities back to the local level in preparation for long term recovery

Local Mission-essential Tasks

1. Coordinate with the responsible party to stabilize hazardous material incidents.
2. Determine the needs to maintain essential services within the jurisdiction.
3. Validate initial assessments of hazmat incidents for the SEOC.
4. Participate in disaster recovery and damage assessment.
5. Triage hazardous material incidents.
6. Begin demobilization planning.

7. Maintain a common operating picture and continue to pass assessment information and damage reports to the SEOC.

State Mission-essential Tasks

Missouri Department of Natural Resources:

1. Continue to implement the information collection plan to gather essential elements of information.
2. Continue to provide information to the JIC about hazmat safety for the public.
3. Continue supporting and conducting cleanup oversight, as prioritized, to mitigate releases in coordination with federal, other state, and local resources.
4. Verify, analyze, and develop reports that provide current operating picture of the incident.
5. Provide situational awareness and deployment requirements for lifesaving response teams.
6. Provide data for situational reporting and incident action planning.
7. Monitor the status of active mission assignments related to response activities.
8. Gather appropriate documentation for fiscal closeout.
9. Begin demobilization planning.

Federal Mission-essential Tasks

Joint Tasks - Environmental Protection Agency and Federal Emergency Management Agency:

1. Monitor the status of active mission assignments.
2. Maintain a common operating picture.
3. Begin demobilization planning.
4. Provide situational awareness and deployment requirements for lifesaving response teams.

4.0 Oversight, Coordination and Communications

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Fire Chief or Local Incident Commander

4.1.2 State

- Missouri Department of Natural Resources

4.1.3 Federal

- Environmental Protection Agency

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Law Enforcement
- Local Public Health Department

- Local Public Works

4.2.2 State

- Missouri Division of Fire Safety
- Missouri Department of Public Safety
- Missouri State Highway Patrol
- Missouri State Water Patrol
- Missouri State Emergency Management Agency
- Missouri Department of Agriculture
- Missouri Department of Conservation
- Missouri Department of Health and Senior Services
- Missouri Department Transportation

4.2.3 Federal

- Federal Emergency Management Agency
- Department of Commerce
- Department of Defense
- Department of Homeland Security
- Department of the Interior
- Environmental Protection Agency
- Department of Agriculture
- Department of Energy
- Department of Health and Human Services
- Department of Transportation
- General Services Administration
- Nuclear Regulatory Commission

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The Emergency Management Assistance Compact (EMAC) offers state-to-state assistance during governor-declared state of emergency (receiving state). During a NMSZ incident, it is assumed that EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

- The Governor of Missouri will declare a disaster

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- SEMA will open an EMAC event in the EMAC Operations System
- Missouri will request assets based on mission assignment
- The assisting state will detail the available assets and estimated costs back to SEMA
- SEMA will approve the resource and cost
- The resource from the assisting state will mobilize and deploy.

For resources that are not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

Table C10-5 lists potential resources that may be requested for Missouri through the EMAC system from non-impacted states according to pre-incident agreement. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C10-5 Pre-scripted EMAC Requests

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	National Guard Civil Support Teams	
	Debris Management Site Inspectors	
	State On Scene Coordinators	
	State Hazardous Material Teams	
	State Mobile Labs	
	Document Unit Team to support Finance and Administration	
	Telecommunications equipment and Operators (ACU 1000s and Satellite Phones)	
	Hazmat Site Inspectors	
	300 Hazmat Technicians	
	Base Camp	

5.2 Pre-scripted Requests for Federal Assistance

Table C10-6 lists potential resources that may be requested through the Federal Government via FEMA MAs. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C10-6 Pre-scripted Action Request Form

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Commissioner	DNR		National Decontamination Team		
	Commissioner	DNR		Household Hazardous Waste Cleanup Contractors		

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C11
ESF-11 – Agriculture and Natural Resources**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

The Emergency Support Function (ESF)-11 Appendix to Annex C of the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for joint local, state, and federal agriculture and natural resource operations following a catastrophic earthquake in eastern Missouri.

Should a catastrophic earthquake occur in the NMSZ, it could quickly overwhelm local government resources and their capability to provide necessary services, leading to a disaster situation. An emergency of this magnitude will pose a threat to all facets of Missouri agriculture and could involve crops, agricultural wastes/discharge, nurseries, pesticides, orchards, animal feeds, animal welfare, injured/displaced animals, dead animals, public health, wild animal, natural resource and other related issues. The multi-level, interagency response to an incident of this nature will be coordinated as outlined in this Annex.

While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire state including the 47 counties recognized by the state as having a high potential to be negatively impacted by a seismic incident. This Plan also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties or the effects of after shocks are provided unless denoted.

For the purpose of this annex the term “Animal” will refer to any animal not covered by the Pets Evacuation and Transportation Standards (PETS) Act, PL 109-308 (i.e. livestock, small animal breeding operations, exotics, exhibition animals, etc.)

Domestic animals, livestock, poultry, and wildlife in Missouri are resources important to the state. Missouri livestock and poultry industries exceed a value of four billion dollars. Missouri ranks third in cow-calf operations in the United States, seventh for hog operations, and third for turkey operations.¹ The following table, taken from 2007 MDA data, estimates the number of livestock and poultry in the affected area.

Table C11-1 Animals in the Affected Counties

	Chicken	Turkey	Pigs	Cattle	Goats	Sheep	Horses
Total	5,803,315	300	28,012	330,000	13,516	4,163	15,256

Note: Numbers estimated from 2007 MDA data. Counties include the 22 highest impacted counties plus St. Louis City included in the MAE Center Data.

In addition there are approximately 3,000 licensed Animal Care Facilities (puppy farms and catteries) in the state. There are several exotic animal breeders in Southern Missouri that are mostly un-regulated and a large bee yard located in the bootheel. There are 5 zoos or animal exhibits in the impact zone near or in St. Louis County and numerous hunting/game ranches along the Missouri River and in the bootheel area. Of specific concern are the numerous research facilities that house animals used for research purposes. The list of these facilities is not readily available to the state.

In the event that livestock, poultry, hogs, goats and sheep in the area need to be temporarily housed or penned table C11-2 indicates the space considerations that would need to be observed.

¹ Missouri economic statistics from www.netstate.com/economy/mo_economy

Table C11-2 Estimated Space Requirements for Large Animals

Animal Type	Size	Space Consideration
Cattle		
Calves	≤ 800 pounds (lbs)	20-35 square feet
Feeder Cattle	800 – 1,200 lbs	30-35 square feet
Mature Cattle	> 1,200 lbs	40-50 square feet
Hogs		
Pre-nursery	12-30 lbs	2-2.5 square feet
Nursery	30-75 lbs	3-4 square feet
Grower	75-150 lbs	6 square feet
Finisher	151-250 lbs	8 square feet
Chickens		
Broilers	< 4.5 lbs	≤ 6.5 lbs/square foot
	4.5 – 5.5 lbs	≤ 7.5 lbs/square foot
	> 5.5 lbs	≤ 8.5 lbs/square foot
Laying Hens	Per Hen	.55 square feet
Other Livestock and Poultry		
Sheep	Per mature animal	15-20 square feet
Goat		20-25 square feet
Horse		70-100 square feet
Turkey		4-6 square feet

Note: Space requirements for livestock and poultry: (for information about small animal space requirements see ESF-6 - i.e. puppy farms and catteries). Data was taken from the MDA SOG 003, Temporary Housing and Care for Livestock and Poultry.

Based on the previous table and the estimated number of livestock and poultry in the affected area it is estimated that the following space (Table C11-3) will be needed in the event that all animals in the impact zone require temporary housing or penning.

Table C11-3 Estimated Space for Displaced Animals in the Impact Zone

Animal	Space needed
Chicken	43,524,862.5 square feet
Turkey	1500 square feet
Pigs	224,096 square feet
Cattle	13,200,000 square feet
Goats	270,320 square feet
Sheep	62,445 square feet
Horses	1,296,760 square feet

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Missouri has over 2,200 licensed veterinarians who may assist during an emergency. Over 1,700 of them are accredited veterinarians, meaning they are familiar with federal regulations as well as state regulations.²

The state also has access to the following resources:

- Missouri Voluntary Veterinary Corps.
- MU Veterinary School.
- Equine Emergency Response Unit.
- Eureka Fire Large Animal Rescue.
- Versailles Rural Fire Large Animal Rescue.
- Missouri Emergency Response Service.
- Springfield FERN approved Laboratory.
- 4 Vet Kits (Springfield Laboratory, EMD, MU Extension).
- 18 Equipment Trailers.
 - Emergency Response Trailers (9).
 - Ag Response Trailers (3).
 - Large Animal Rescue Trailer (1).
 - Cleaning and Disinfecting Trailers (2).
 - Dead Animal Trailers (3).
 - Chutes (6) – Federal Resource.

Using MAE Center data and estimates for animals in the affected area, resources on hand, and need requirements the following table was prepared to show estimated resource requirements.

Table C11-4 Estimated Resource Requirements

Resource	Description	Total Requirement	Local/State Provided	Support Requirement
ESF 11 Coordinator	Representative for the SEOC from MDA	6	6	0
Subject Matter Experts (SMEs)	Technical Specialists –District Veterinarians	23	9	14
Food Investigation Teams	Teams of 4 people to collect food samples at food production facilities	23	6	17
Animal Response Teams	Small animal and large animal rescue and medical teams.	23	4	19
Carcass Disposal Teams	Field teams to dispose of animal carcasses that have become a threat to human health; requires additional supervisor and SMEs	23	0	23

² Estimations and resource numbers from the Missouri Department of Agriculture

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Resource	Description	Total Requirement	Local/State Provided	Support Requirement
Breeding Kennel Inspection Teams	Technical assistance for puppy farms and catteries	12	12	0
Meat/Poultry/Dairy Inspection Teams	Inspect and collect samples at meat and poultry production facilities and dairy facilities	23	10	13

In addition to the resources listed in the table the state estimates they will need:

- Heavy equipment and operators.
- Animal containment for temporary housing of large animals, poultry, small animals (fencing, cages, pens).
- PPE.
- Cleaning equipment and cleaning crews.
- Disinfectants.
- Food and water for animals.
- Feeders and water troughs.
- Bedding Material.
- Shade structures for pens.
- Animal transportation assets (trailers, trucks, etc).
- Manure storage and disposal system.

The ESF-11 functions for the State of Missouri are different than the defined ESF-11 functions for the federal government. It is possible that the primary and support agencies for the federal government ESF-11 will be performing missions in conjunction with ESF-6 or ESF-14 while the state ESF-11 agencies are providing support or performing different functions altogether. Specifically bulk distribution of food and pet sheltering will be a federal mission coordinated with Missouri ESF-6.

ESF-11 for the State of Missouri will address the following concerns during this event:

- Support for ESF-6 and other ESFs as requested.
- Assessment of agricultural needs in affected areas including recovery of injured animals and/or disposal of dead animals.
- Agricultural surveillance of the affected areas throughout the disaster.
- Provision of agriculture-related services and supplies such as necessities for uninjured or moderately injured animals.
- Agriculture-related recommendations and related releases to the public.
- Identification and application of appropriate agriculture assistance programs.
- Livestock, poultry, swine, or other animal related disease.

ESF-11 Agriculture and Natural Resources for the federal government supports state and local authorities and other federal agency efforts to provide nutrition assistance; control and eradicate, as appropriate, any

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outbreak of a highly contagious or economically devastating animal/zoonotic disease, or any outbreak of an economically devastating plant pest or disease; ensure the safety and security of the commercial food supply; protect Natural and Cultural Resources and Historic Properties (NCH) resources; and provide for the safety and well-being of household pets during an emergency response or evacuation situation. ESF-11 for the federal government will address the following concerns for this event:

- Provide nutrition assistance via United States Department of Agriculture (USDA) food commodities and the Supplemental Nutrition Assistance Program (SNAP).
- Respond to animal and agricultural health issues.
- Provide technical expertise in support of animal and agricultural emergency management.
- Ensure the safety and defense of the Nation’s supply of meat, poultry, and processed egg products.
- Protect Natural, Cultural, and Historical (NCH) resources.

Because of the differences in responsibilities under the NRF and the Missouri State EOP Table C11-5, Responsibility Matrix, was developed to indicate where in this OPLAN each function resides.

Table C11-5 State/Federal Responsibility Matrix for the NMSZ OPLAN

Function	Federal Agency	Missouri Agency	ESF Responsibility in the NMSZ OPLAN	Notes
Providing nutrition assistance	USDA Food and Nutrition Service (FNS)	Missouri Department of Social Services (MDSS)	ESF-6 Mass Care	Requires support from ARC, VOAD, etc.
Responding to animal and agriculture health issues	USDA’s Animal and Plant Health Inspection Service (APHIS)	Missouri Department of Agriculture (MDA)	ESF-11 Agriculture and Natural Resources ESF-8 Public Health (vector control)	Modified response to deal with dead animals and vector control
Ensuring the safety and defense of the Nation’s supply of meat, poultry, and processed egg products	USDA’s Food Safety and Inspection Service (FSIS)	Missouri Department of Agriculture (MDA)	ESF-11 Agriculture and Natural Resources ESF-8 Public Health	Inspect food sources in impact zone. Activate plans to secure sector assets.
Protecting NCH resources	Department of the Interior (DOI)	MDNR SHPO	ESF-11 Agriculture and Natural Resources	Is not covered under the scope of this plan (120 hours)
Providing technical expertise in support of animal and agriculture emergency management	USDA/APHIS	Missouri Department of Social Services (MDSS) and Missouri Department of Agriculture	ESF-11 Agriculture and Natural Resources and ESF 6 Mass Care	Relies heavily on Humane Society and other NGO groups

1.1 Purpose

The purpose of this annex is to provide ESF-specific information for the OPLAN. The ESF-11, Agriculture and Natural Resources Annex details the ESF's limitations, organization, and course of action to execute the roles and responsibilities assigned to the ESF during a NMSZ incident. The OPLAN annex identifies roles and responsibilities, enhancing unity of effort, and links existing plans. Specifically, this Annex provides the ESF-11 Coordinator with the basis for evaluating and accepting or redirecting mission assignments and tasks in response to an earthquake event in the NMSZ area.

Objective: There is no specific objective for ESF-11 in the NMSZ OPLAN

There is not a specific objective for ESF-11 in the NMSZ OPLAN. ESF-11 will support ESF-6 during immediate response operations and will perform primary response functions later in the response once life-saving missions are complete and access to the area by ground has been established.

1.2 Considerations

- ESF-11 responsibilities at the state level are different than the defined ESF-11 responsibilities for the federal level.
- Most ESF-11 responsibilities are not critical to life safety and therefore may not be a priority.
- National Veterinary Response Teams (NVRT) can be dispatched to the affected state as requested through the MDA to FEMA. Veterinarian Medical Assistance Support Teams (VMATS) require an MOU and should be requested through private channels.
- Animal evacuation from a disaster area must occur in a coordinated manner under the direction of the incident command team to allow success without impeding handling of the disaster and while protecting public safety.
- Animal agriculture production operations, animal shelters, zoos, veterinary clinics, etc. may need assistance to help them in their efforts to maintain or regain business continuity. If not directly damaged by the earthquake, they still may need support related to power generation, fuel, water, and feed to maintain or reactivate their operations.
- Animal carcasses, resulting from a non-disease or non-toxic disaster event, are generally considered debris and should be handled accordingly. MDA and APHIS will coordinate to decide how animals will be disposed of. They can be buried, burned, composted, or taken to appropriate landfills, depending on the speed, cost, and suitability of the disposal method. Composting will usually be the preferred method, either onsite or at approved locations.
- Following a strong earthquake, there will be damage to barns, fences, and other enclosures that may lead to the release of animals that subsequently roam about unrestricted, endangering the health and safety of humans.
- A large number of horses and other livestock in the area may be affected, both by injury and by food/water deprivation.
- Emergency support initiatives may last for weeks or months.
- The state may request National Veterinary Stockpile (NVS) resources as needed for response to animals during this event. This will need to be requested by the State Veterinarian.

- Animal carcasses if not properly handled and disposed of in a timely manner, they may become an extreme nuisance issue and the state may consider them a public health issue, contaminating the air, water and overall environment for the public. The determination of if the carcasses are an immediate threat to public health and/or safety will need to be determined by an appropriate state agency.
- Agricultural emergencies lead to long-term economic impacts requiring long-term federal, state, and local assistance recovery programs.
- Several factors, including time of day, epicenter, magnitude, duration and aftershocks will compromise response operations.
- Weather conditions may have a significant impact, particularly during winter months.

1.3 Assumptions

- Federal response efforts are designed to complement and supplement, rather than supplant, the state and local response. The same tiered response would be applicable between ESF-11 agencies and their state counterparts.
- A catastrophic earthquake disaster in Missouri may lead to displacement or death of animals.
- Licensed animal care providers, as well as licensed wildlife groups, are able to help treat and shelter some of the sick and injured animals and wildlife as requested by the State Emergency Operations Center (SEOC).
- State and local officials are aware of their responsibilities and respond as directed in the Missouri State Emergency Operations Plan (SEOP) and Local Emergency Operation Plans (LEOP).
- Local livestock producers, dairymen, feedlot operators, poultry producers, horsemen, and hog producers, etc. will likely be too busy with their own concerns to contact local authorities, the local emergency operations center will need to actively seek information concerning animal issues.
- Animals may become unconfined or moved during a disaster event due to various factors. These animals may pose a threat to public safety.
- Dead animals from the disaster will become debris. If not properly handled and disposed of in a timely manner, they will become an extreme nuisance issue and are considered a public health issue, contaminating the air, water and overall environment for the public.
- Requests for agricultural assistance will be forwarded from the local EOC to the SEOC.
- Animals may die during the evacuation, transportation or sheltering process. Animals left behind may die also from the impacts of the emergency event. Animal agriculture production activities may also lose an integral life-sustaining or product-sustaining part of their operations, and animals may die. Regardless of the reason, animal carcasses will need to be properly disposed of in a timely manner.
- The National Veterinary Stockpile (NVS); a stockpile of veterinary countermeasures, supplies, equipment, field tests, vaccines and response support services overseen by USDA/APHIS, will be available to supply resources as needed for response to animals during this event. This will need to be requested by the State Veterinarian.

- As soon as feasible, ESF-11 resources will begin the relief effort including: respond to requests for veterinary medical attention, sheltering or stabling, and assistance with removal and disposal of animal carcasses.
- State agricultural agencies would be overwhelmed and would likely require federal technical assistance to augment their ICS structure. This assistance could be provided under a verbal agreement if the state is unable to submit a timely Action Request Form (ARF), and then followed with ARF submission.
- Federal ESF-11 response partners will begin pre-deployment of resources and staging of people and equipment in anticipation of mission tasking.
- In coordination with the FEMA regional response and issued mission assignments federal ESF-11 response partners will begin pre-deployment of resources and staging of people and equipment in anticipation of additional mission assignment tasking.
- When tasked to respond there will be an integrated local, state and federal response supporting the Mission-essential Tasks.

1.4 Limiting Factors

- Local and state resources for agricultural response will be quickly overwhelmed.
- Stress from the disaster and resulting impacts to natural habitats may cause non-domesticated animals to have altered behavior which may cause additional danger or difficulty for first responders.
- Rural farmers may have limited equipment and resources for moving their animals; in addition transportation routes may be blocked.
- Not all requests for animal care response assistance can be handled by the state due to many factors such as limited resources, limited skills, limited funds, limited time in which to respond, threats to responder safety, etc.
- Animals displaced by the earthquake may not be able to be located and confined in a timely manner due to a lack of search and confinement methods, materials, and labor.

2.0 Mission

Local, state and federal partners, private entities, and Non-Governmental Organizations (NGO) will coordinate efforts to respond to mission assignments as appropriate and to respond to or provide support to response operations.

The mission of ESF-11 for the State of Missouri will be to provide the mechanism for coordination of local, state, and federal resources to respond to a catastrophic incident involving animals (domestic and wild) and plants.

ESF-11 does not have an immediate life safety function following a catastrophic earthquake, but will work to support other ESF operations as tasked in support of life safety.

The federal partners for ESF-11 will also provide assistance to life sustaining missions that fall within their mission essential operations.

As indicated in the table below ESF-6 partners have the primary responsibility for commodity distribution. However, ESF-11 partners for the State of Missouri can be tasked to provide inspection for

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food production and processing facilities in the impact zone to determine if the food is fit for animal or human consumption.

Table C11-6 Commodity Responsibility Matrix

Facility	Emergency Support Function			
	Missouri ESF-11	Federal ESF-11	Missouri ESF-6	Missouri ESF-8
Grocery Stores		Inspection	Distribution	Inspection Disposal
Grocery Warehouses		Inspection Disposal	Distribution	Inspection Disposal
Food Production Plant	Inspection Disposal	Inspection Disposal		
Meat Processing Plant	Inspection Disposal	Inspection Disposal		
Milk Production	Inspection Disposal			
Egg Production	Inspection Disposal	Inspection Disposal		
Grain Storage				Inspection Disposal

Inspection – Review of food products to ensure safety for human or animal consumption.

Disposal – Disposal of spoiled, contaminated or food otherwise unfit for human or animal consumption.

Distribution – Distribution of foods deemed fit for human consumption to the population through various methods including NGOs.

As indicated prior, the term “animal” for this appendix refers to any animal that is not covered by the PETS Act. ESF-11 and their response partners can be tasked with evacuation, sheltering, medical care, feeding, and carcass disposal for any animal not covered by the Act. Federal ESF-11 response partners can also be tasked with these responsibilities as resources allow. The matrix in Table C11-7 below indicates which response partners can be tasked with responsibilities related to different types of animals.

Table C11-7 Animal Responsibility Matrix

Facility	Emergency Support Function		
	Missouri ESF-11 partners can assist with:	Federal ESF-11 partners can assist with:	Missouri ESF-6 partners can assist with:
Livestock Farm/Ranch	Evacuation Sheltering Medical Care Feeding Carcass Disposal	Evacuation Sheltering Medical Care Feeding Carcass Disposal	

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Facility	Emergency Support Function		
	Missouri ESF-11 partners can assist with:	Federal ESF-11 partners can assist with:	Missouri ESF-6 partners can assist with:
Livestock Mass Feeding Operation	Evacuation Sheltering Medical Care Feeding Carcass Disposal	Evacuation Sheltering Medical Care Feeding Carcass Disposal	
Small Animal Breeding Operation	Evacuation Sheltering Medical Care Feeding Carcass Disposal	Evacuation Sheltering Medical Care Feeding Carcass Disposal	
Zoo/Animal Exhibit	Evacuation Sheltering Medical Care Feeding Carcass Disposal	Evacuation Sheltering Medical Care Feeding Carcass Disposal	
Exotic Animal Owner	Evacuation Sheltering Medical Care Feeding Carcass Disposal	Evacuation Sheltering Medical Care Feeding Carcass Disposal	
Family Pets	Carcass Disposal	Evacuation Sheltering Medical Care Feeding Carcass Disposal	Evacuation Sheltering Medical Care Feeding
Service Animal Owner	Carcass Disposal	Evacuation Sheltering Medical Care Feeding Carcass Disposal	Evacuation Sheltering Medical Care Feeding
Animal Research Facilities	Evacuation Sheltering Medical Care Feeding Carcass Disposal	Evacuation Sheltering Medical Care Feeding Carcass Disposal	
Fish Hatcheries	Feeding Carcass Disposal		
Wild Animals that are displaced by disaster	Carcass Disposal Technical Support	Carcass Disposal Technical Support	

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases of response within specified periods of time. A

description of these Phases is in Section 3.3 of Annex C – Operations. Table C11-8 lists the (sub) phases of Phase 2 (Phases 2a, 2b, and 2c).

Table C11-8 Response Phase Operational Periods

Response Phase	Operational Period
2a – Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Employment/Sustained Response	E + 72 – E + 120 hrs +

The phases of response and operation are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

3.1.1 General Concepts

It is anticipated that Missouri ESF-11 will primarily performing data gathering, surveillance and planning during the first 72-hours of this incident. As the primary coordinating agency, MDA will gather information from local representatives, support agencies, and other agriculture related organizations throughout the state concerning the impact suffered. With appropriate feedback from local and regional representatives, MDA will compile status reports, which will be provided to the SEOC for incorporation into SitReps and Incident Action Plans (IAP) as appropriate.

The federal ESF-11 activities will be coordinated by USDA’s Animal and Plant Health Inspection Service (APHIS). Following the completion of immediate life sustaining missions and once access routes open into the impacted area federal and Missouri ESF-11 can begin sending assets for animal rescue, animal carcass disposal, food inspection and disposal, and initiation of agriculture assessment programs.

MDHSS (ESF-8) in coordination with MDA (ESF-11) will inspect food supplies intended for both human and animal consumption that might have been contaminated during the incident. In coordination with the JIC, MDA and DHSS will issue food advisories for those in the affected area.

3.1.2 Phased Response Concept

3.1.2.1 Phase 2a: Immediate Response

Purpose of Phase

Gather data from the local level pertinent to agriculture resources, food production facilities, food storage facilities and natural resources to form a common operating picture.

End State of Phase

Development of a situation report detailing the impact to farms, ranches, production facilities, food storage facilities and natural resources.

Local Mission-essential Tasks

Local Incident Commanders will prioritize response efforts based on life safety. It is unlikely that the local emergency response capabilities will extend to agricultural response because of other more pressing incidents. Available resources for agriculture response could include volunteers and private agencies in the area. Demand for additional resources will be immediate.

The specific ESF-11 tasks to be performed by local agencies are listed below:

1. Coordinate with local agriculture resources to gather data (i.e. extension office, veterinarians, etc.).
2. Gather information from local agricultural resources:
 - a. Number of deceased animals.
 - b. Location of deceased animals.
 - c. Number of sick/injured animals.
 - d. Location/number of large animals in need of rescue.
 - e. Damage to food processing facilities.
 - f. Animals in transport that may be stuck on the roadways.
 - g. Animal food and water supply issues.
 - h. Animal air supply issues.
 - i. Animal containment issues.
 - j. Plans to evacuate animals.
3. Send information gathered to the SEOC.
4. Provide recommendations to the SEOC about priority of actions and outside assistance required.

State Mission-essential Tasks

ESF-11 response in the State of Missouri is defined as responding to animal and plant diseases and pests and ensuring the safety and security of the commercial food supply. In a catastrophic earthquake ESF-11 would be responsible for commercial animal (livestock) related disaster assistance including transportation of animals out of the affected area, disposal of carcasses, support for animal husbandry, housing and handling, and liaison functions. ESF-11 will also work with the USDA to ensure the safety of the commercial food supply by inspecting food production facilities as they are able. The MDA will coordinate agriculture response.

Responsibilities of the state are described in the Missouri SEOP. The specific ESF-11 tasks to be performed by the state agencies are listed below:

Missouri Department of Agriculture:

1. Provide an ESF-11 representative at the SEOC.
2. Establish contact with the ESF-11 coordinator at the local level; gather contact information and EOC location information.
3. Assess the situation and in coordination with the local IC, develop strategies to respond to the emergency.
4. Begin planning for agricultural response efforts.
5. Establish contact with the federal ESF-11 Coordinator.
6. Coordinate with the MDC on wildlife issues in the affected area.
7. Develop public information items in coordination with DHSS, MDNR, and MDC and provide to the JIC.
8. Prompt local EOC to gather agriculture data points needed to inform response efforts.
9. Activate and coordinate with the State Veterinary Corps.

10. Coordinate with private entities and NGOs as they arrive or contact the state offering assistance.

11. Immediately request assistance, including the following:

- a. Inter-state mutual aid resources.
- b. Intra-state mutual aid resources.
- c. Federal resources.

Missouri Division of Natural Resources:

Provide information as requested including:

- a. List of permitted Confined Animal Feeding Operations.
- b. List of air curtain burners.
- c. List of landfill locations.
- d. Soil maps.

Missouri Department of Insurance, Financial Institutions and Professional Registration:

Provide a list of licensed veterinarians that may be able to assist during the emergency.

Missouri Department of Health and Senior Services:

1. Provide advice and technical assistance regarding public health issues.
2. Coordinate with local public health agencies and/or medical facilities to ensure all animal responders have tetanus vaccinations made available to them prior to entering the impact zone.

Humane Society of Missouri:

1. Provide technical and material support to local animal care and animal control organizations.
2. Coordinate animal-welfare-organization offering assistance from outside the state for animal-related needs.

Federal Mission-essential Tasks

The federal ESF-11 Coordinator (USDA/APHIS) will be the point of contact for the coordination of USDA ESF-11 resources. Federal ESF-11 will coordinate with Missouri ESF 6 to support the animal care issues at the mass care shelters. Federal ESF-11 will coordinate with Health and Human Services (HHS) National Veterinary Response Teams (NVRT) and Department of Defense (DOD) in support of veterinary requirements. The federal ESF-11 Coordinator will coordinate across FEMA Regions as necessary.

Key decisions for federal ESF-11 agencies will be made through consultation between agency Points of Contact (POC) and their respective regional/HQ leaders. The federal ESF-11 Coordinator may be the initial POC for key decisions and will forward these to the applicable agency POC. Federal ESF-11 Coordinators are also responsible for:

- Coordination before, during, and after an incident, including pre-incident planning and coordination.
- Maintaining ongoing contact with ESF-11 primary and support agencies.
- Conducting periodic ESF-11 meetings and conference calls.
- Coordinating efforts with corresponding private-sector organizations.

- Coordinating ESF-11 activities relating to catastrophic incident planning and critical infrastructure preparedness, as appropriate.

The specific ESF-11 tasks to be performed by federal agencies are listed below:

U.S. Department of Agriculture APHIS Regional ESF-11 Coordinator:

1. Contact the Regional Emergency Program Manager and National Coordinator.
2. Establish contact with the Missouri ESF-11 Coordinator at the SEOC.
3. Activate federal ESF-11 response activities including deployment of an ESF-11 liaison/coordinator to the RRCC.
4. Coordinate with ESF-6, ESF-8, and other ESFs as needed to accomplish federal mission.
5. Assist with the gathering of impact assessment data for agriculture (i.e. food storage).
6. Submit a request for APHIS resources to dispatch.
7. Pre-deploy resources to staging areas.
8. Coordinate with private entities and NGOs as they arrive or as they offer assistance.

Department of Health and Human Services:

Determine which foods are fit for human consumption and identify potential problems associated with contaminated foods in conjunction with ESF-8.

3.1.2.2 Phase 2b: Deployment

Purpose of Phase

Develop priorities and objectives for agricultural response.

End State of Phase

Objectives for agricultural response are added to the incident action plan and resources begin to mobilize for agricultural response.

Local Mission-essential Tasks

1. Continue to gather agriculture data and send it to the SEOC.
2. Provide ground ingress and egress status to the EOC.
3. Request assistance from the SEOC as needed.

State Mission-essential Tasks

Missouri Department of Agriculture:

1. Develop ESF-11 priorities for the next operational period based on data gathered.
2. Contact large animal rescue resources and veterinary corps resources in the state including but not limited to:
 - a. Missouri Veterinary Corps.
 - b. Equine Emergency Response Unit.
 - c. Eureka Fire Large Animal Rescue.
 - d. Versailles Rural Fire Large Animal Rescue.

- e. Missouri Emergency Response Service.
3. Work with GIS resources to develop maps and other resources for ground responders.
4. Begin planning for animal carcass disposal.
5. Provide ESF-5 with summarized information on the status of recommended and ongoing protective actions.
6. Coordinate with ESF-7 regarding storage sites and staging areas for animal food and medical supplies.
7. Serve as the coordination point for animal related disaster assistance and assist with identification and housing and other related services for animals.
8. Assess whether meat, poultry, and egg product processors, distributors, and importers in the affected area are able to provide safe and secure food.
9. Work with federal partners to properly dispose of contaminated food products in order to protect public health and the environment in the affected area.
10. Request the NVRT.
11. Request the Office of the Inspector General (OIG) Response Team to respond to any animal testing facilities that may have been compromised.
12. Coordinate with ESF-1 for ground transportation issues and animal transport issues.
13. Coordinate with ESF-8 for food inspection and other public health issues.
14. Coordinate with ESF-6 for commodity distribution and other animal issues as requested.
15. Track the locations of all veterinary personnel working in the affected area and direct movement of these personnel from one area to another.
16. Coordinate public information, news releases, and briefings with ESF-15.
17. Provide diagnostic and laboratory support as requested.
18. Provide treatment, feeding, housing, and care of lost and abandoned animals as able.
19. Recommend means of preventing the spread of disease in wildlife.
20. Start coordination with ESF-6 to house and shelter pets.

Missouri Department of Natural Resources:

1. Create and maintain records on the location and extent of the disposal area for animal carcass disposal.
2. Provide technical advice regarding environmental impacts, particularly soil and geologic conditions, drinking water well protection, and burial site suitability.
3. Provide technical advice regarding environmental impacts, particularly contamination issues involving surface water, groundwater, and public drinking water systems.
4. Provide technical advice regarding environmental impacts, particularly air pollution and solid waste from burning animals.

Missouri Department of Conservation:

Coordinate with state and federal agencies and private landowners to address wildlife issues.

Missouri Department of Transportation:

Assist in transport of carcasses or debris.

Missouri State Highway Patrol:

Provide aerial transportation of specimens to the laboratory as requested.

Missouri Water Patrol:

Collect deceased animals from creeks, streams, rivers, and bodies of water.

Missouri Department of Health and Senior Services:

Provide public health technical assistance to MDNR in identifying disposal sites within local jurisdictions.

Humane Society of Missouri:

1. Coordinate with FEMA and the State Donation Coordinator about needs for animal products and supplies.
2. Dispatches animal-needs assessment teams to respond and to conduct animal rescues in devastated areas.

Missouri Veterinary Medical Association:

1. Coordinate with governmental authorities and volunteer agencies on matters regarding: public information, operations, evacuation, transportation supplies, equipment use, etc.
2. Administer and coordinate the Missouri Volunteer Veterinary Corps and employ retired and volunteer veterinarians willing to assist in emergency response situations.
3. Coordinate relief efforts from state and national organizations that assist veterinarians with matters related to the disaster (i.e. American Veterinary Medical Association (AVMA), Veterinary Medical Assistance Team (VMAT)).

Federal Mission-essential Tasks

U.S. Department of Agriculture:

1. Continue coordination with ESF-6 and ESF-8 to perform federal ESF-11 missions.
2. Coordinate federal agency support activities and delivery of federal assistance to the affected area.
3. Submit daily ESF-11 reports to the ESF-11 desk officer at the NRCC and the ESF-11 National Coordinator for agency distribution.
4. Provide GIS mapping capability for the meat, poultry, and egg production facilities it regulates to assist state and local authorities to establish food control zones to protect the public health.
5. Review vector control issues and provide information to the SEOC.
6. Coordinate with ESF-1 for ground transportation issues and animal transport issues.
7. Coordinate with ESF-8 for food inspection and other public health issues.
8. Coordinate with ESF-6 for commodity distribution and other animal issues as requested.
9. Fill requests for equipment, personnel, and supplies essential for emergency response to agriculture as they are received and prioritized.

USDA's Food Safety and Inspection Services:

1. If resources are available and if the area is accessible, assess whether meat, poultry, and egg product processors, distributors, and importers in the affected area are able to provide safe and secure food.
2. Work with federal, state, and local authorities to ensure the proper disposal of contaminated food products in order to protect public health and the environment in the affected area.

USDA's Animal and Plant Health Inspection Service:

1. Respond to animal and agriculture health issues.
2. Provide technical expertise in support of animal and agricultural emergency management.

Department of Commerce:

Provide detailed site-specific weather forecasts and forecasts of travel time for river contaminants as requested.

Department of Defense:

1. Provide laboratory and diagnostic support, subject-matter expertise, and technical assistance.
2. Assist animal emergency response organizations, or others as requested and appropriate.
3. Provide resources including:
 - a. Senior Army Veterinary Corps Officers to function as Defense Veterinary Liaison Officers and Defense Veterinary Support Officers (who serve as the onsite point of contact for DOD veterinary functions).
 - b. Other military specialists trained in veterinary support and public health.
4. Provide laboratory support to assist and augment the capabilities of APHIS.

U.S. Army Corps of Engineers:

Provide expertise and resources to assist in the removal and disposal of contaminated and non-contaminated debris, to include animal carcasses.

Department of Health and Human Services:

Provide veterinary public health and clinical subject-matter expertise support through the U.S. Public Health Service Commissioned Corps veterinary teams and epidemiologists.

Occupational Safety and Health Administration:

Provide worker safety and health technical assistance during emergency animal health response activities including:

- a. Site safety monitoring.
- b. Worker exposure sampling and analysis.
- c. Respirator fit-testing.

Environmental Protection Agency:

Provide surge capacity for laboratory and diagnostic support.

3.1.2.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

Begin agricultural response once ground access to the area has been established.

End State of Phase

Assignment of ESF-11 missions to response resources to the affected area.

Local Mission-essential Tasks

1. Continue to request supplies, equipment, personnel and technical assistance from support agencies, volunteer organizations, and other private sector resources through the SEOC.
2. Manage and coordinate with the SEOC evacuation or disposal of animals from impact area, and provide technical assistance to prevent animal injury and disease dissemination.
3. Record the locations of animal disposal sites using GIS technology, and place the information files on the sites with the appropriate agencies such as MDNR, MDHSS, and County Recorder of Deeds.

State Mission-essential Tasks

Missouri Department of Agriculture:

1. In coordination with appropriate support agencies, provide limited assistance, if available to, small animal breeders, zoos and exhibits, and research facilities that house animals. These owners/operators are encouraged to maintain full response capabilities in-house.
2. Continue to address issues of wild animals and domestic animals that are roaming populated areas and causing safety issues or public health concerns.
3. Coordinate local emergency response teams with state and federal support networks.
4. Coordinate with MDNR personnel on suitable burial locations for animals.
5. Record the locations of animal disposal sites using GIS technology, and place the information files on the sites with the appropriate agencies such as MDNR, MDHSS, and County Recorder of Deeds.
6. Continue to augment services to affect rapid recovery and to provide veterinary medical services (i.e. animal rescue, animal evacuation, humane euthanasia, etc.).
7. Maintain financial records on personnel, supplies, and other expended resources.
8. In coordination with ESF-8 provide for inspection and assessment of food animal production facilities and products storage. Request federal support for surveillance, inspection and verification of meat, poultry, egg and milk products in the affected areas. Laboratory support needs may be identified and requested.
9. Coordinate the assignment of relief personnel and the distribution of supplies from supply areas or staging areas.
10. Assist support agencies for long-term maintenance, placement, or disposition of animals which cannot be returned to their normal habitat or which have been separated from their owners.
11. Coordinate with ESF-1, ESF-3 and ESF-8 for the removal and proper disposal of animal waste and dead animals.
12. Provide reasonable level of assistance and care for livestock impacted by the disaster.
13. Continue to coordinate with ESF-1 for animal movement issues.
14. Provide animal food and water as able to the affected area.
15. Review humane euthanasia processes if required and issue procedures.

16. Prioritize animal response capabilities.

17. Assist ESF-6 as needed.

Federal Mission-essential Tasks

U.S. Department of Agriculture:

1. Coordinate federal response and recovery operations in close coordination with partner agencies and departments, and the private sector.
2. Continue communication with ESF-14 primary and support agencies regarding response and recovery efforts related to ESF-11 NRF activities.
3. In coordination with ESF-8 review vector control issues in the affected area.
4. Provide assistance to small animal breeders, animal exhibits and zoos, and exotic animal owner/breeders as requested.
5. Assist with inspections of food production and food storage facilities.
6. Assist with the disposal of animal carcasses and form carcass disposal teams.
7. Communicate with the State Emergency Board.

Animal and Plant Health Inspection Service:

Coordinate with ESF #14 to ensure continued assistance is provided for animals during long-term community recovery as requested.

Department of the Interior:

Provide technical and financial assistance to landowners and communities as appropriate to help assess the restoration needs and requirements for important fish and wildlife habitats and populations.

Federal Emergency Management Agency:

Coordinate the environmental and historic preservation compliance requirements for all response, recovery, and mitigation activities funded through the Stafford Act, including mission assignments.

Department of Conservation:

Provide expertise and consultation on endangered species, and essential fish habitat issues. Implements the activities determined appropriate to restore fisheries and any other natural resources or prevent a failure in the future in accordance with the Magnuson-Stevens Act (Section 312, 16 U.S.C. 1801, et seq.).

Environmental Protection Agency:

Provide technical assistance, subject-matter expertise, and support for biological, chemical, and other hazardous agents on contaminated facility remediation, environmental monitoring, and contaminated agriculture (animal/crops) and food product decontamination and disposal.

4.0 Oversight, Coordination and Communications

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- None

4.1.2 State

- Missouri Department of Agriculture

4.1.3 Federal

- Department of Agriculture
- Department of the Interior

4.2 Cooperating Agencies (Support)

4.2.1 Local

- None

4.2.2 State

- Missouri Office of the Governor
- Missouri Department of Conservation
- Missouri Department of Economic Development
- Missouri Department of Health and Senior Services
- Missouri Department of Social Services
- Missouri Department of Transportation
- Missouri Department of Mental Health
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri National Guard
- Missouri State Emergency Management Agency
- Missouri State Highway Patrol
- Missouri Water Patrol
- Missouri Voluntary Organizations Active in Disaster

4.2.3 Federal

- Department of Commerce
- Department of Defense
- Department of Energy
- Department of Health and Human Services
- Department of Homeland Security
- Department of Justice
- Department of Labor
- Department of State

- Department of Transportation
- Environmental Protection Agency
- General Services Administration
- National Archives and Records Administration
- U.S. Postal Service
- Advisory Council on Historic Preservation
- American Red Cross
- Heritage Emergency National Task Force

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The Emergency Management Assistance Compact (EMAC) offers state-to-state assistance during governor-declared state of emergency (receiving state). During a NMSZ incident, it is assumed that EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

- The Governor of Missouri will declare a disaster.
- SEMA will open an EMAC event in the EMAC Operations System.
- Missouri will request assets based on mission assignment.
- The assisting state will detail the available assets and estimated costs back to SEMA.
- SEMA will approve the resource and cost.
- The resource from the assisting state will mobilize and deploy.

For resources that are not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

Table C11-9 lists potential resources that may be requested for Missouri through the EMAC system from non-impacted states according to pre-incident agreement. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C11-9 Pre-scripted EMAC Requests

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	State Veterinarian Response Teams	
	Document Unit Team to support Finance and Administration	
	Animal Emergency Response (AER)	

5.2 Pre-scripted Requests for Federal Assistance

Table C11-10 lists potential resources that may be requested through the Federal Government via FEMA MAs. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C11-10 Pre-scripted Action Request Forms

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Ag Secretary	MDHSS-Sit Room	A	Animal Health Incident Mgmt Team	P	

6.0 Operational Tools

Figure C11-1 Dairy and Cheese Processing Facilities

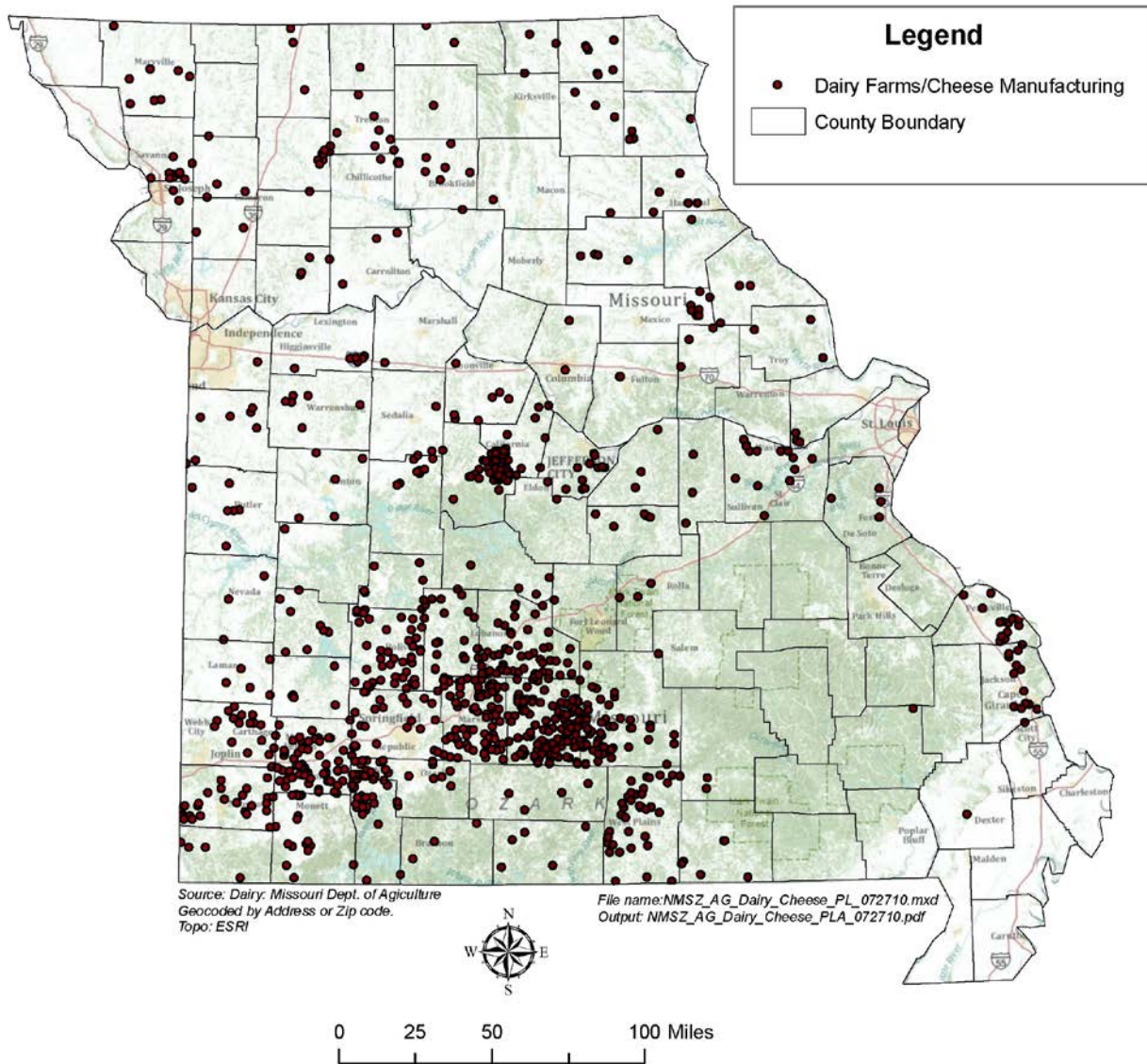


Figure C11-2 Chicken Processing Facilities

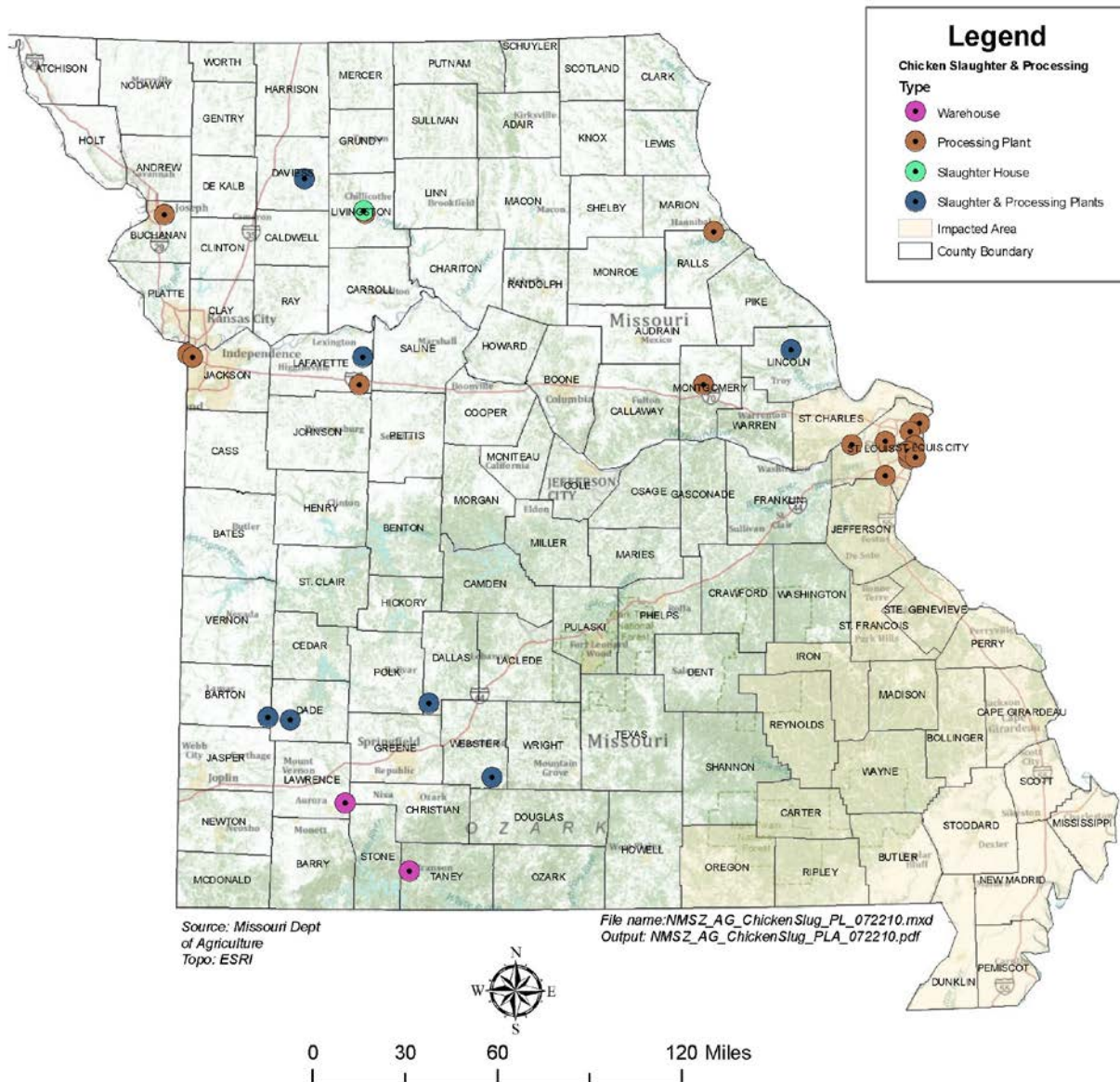


Figure C11-3 Hunting and Gaming

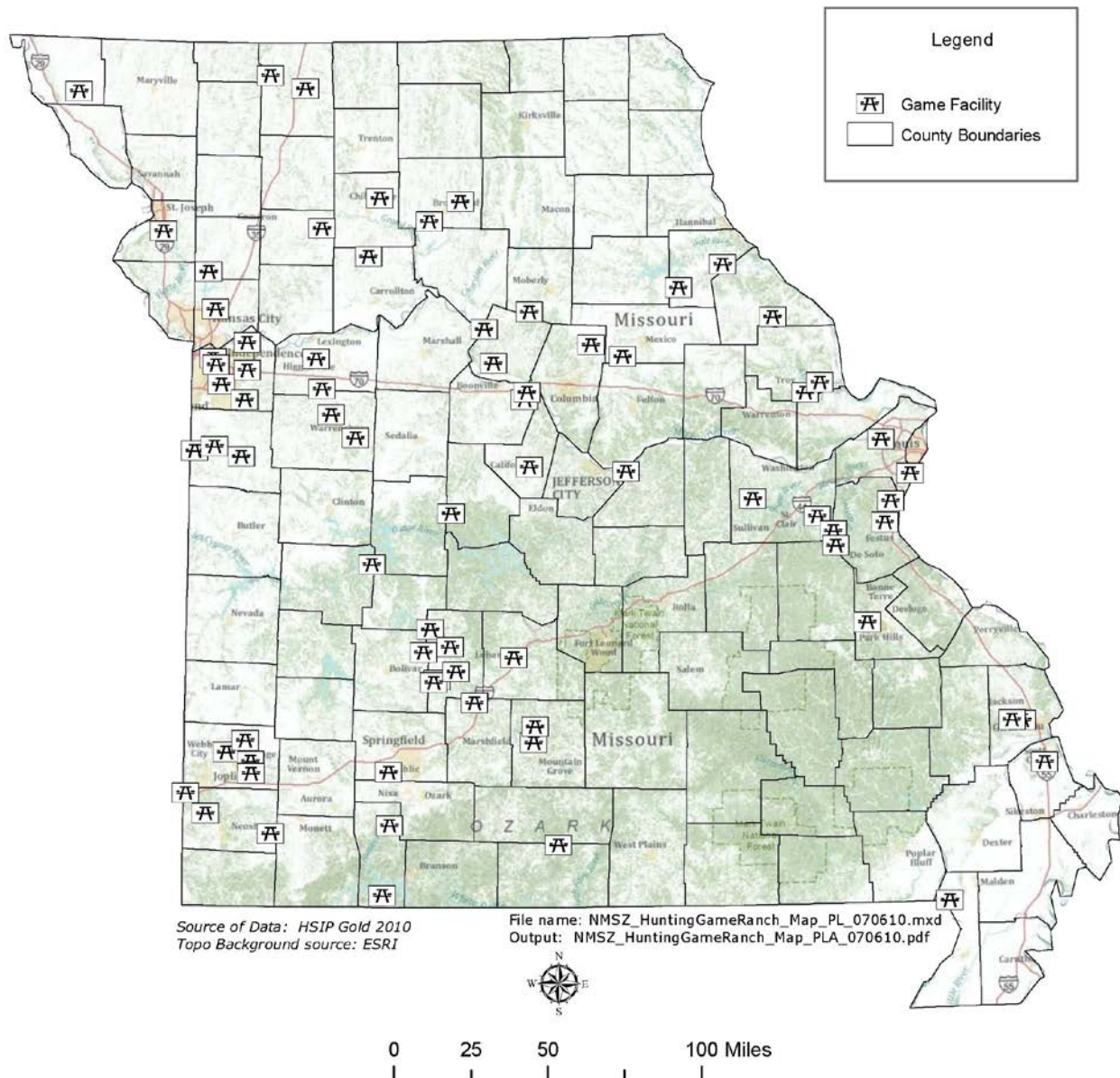


Figure C11-4 Zoological Parks

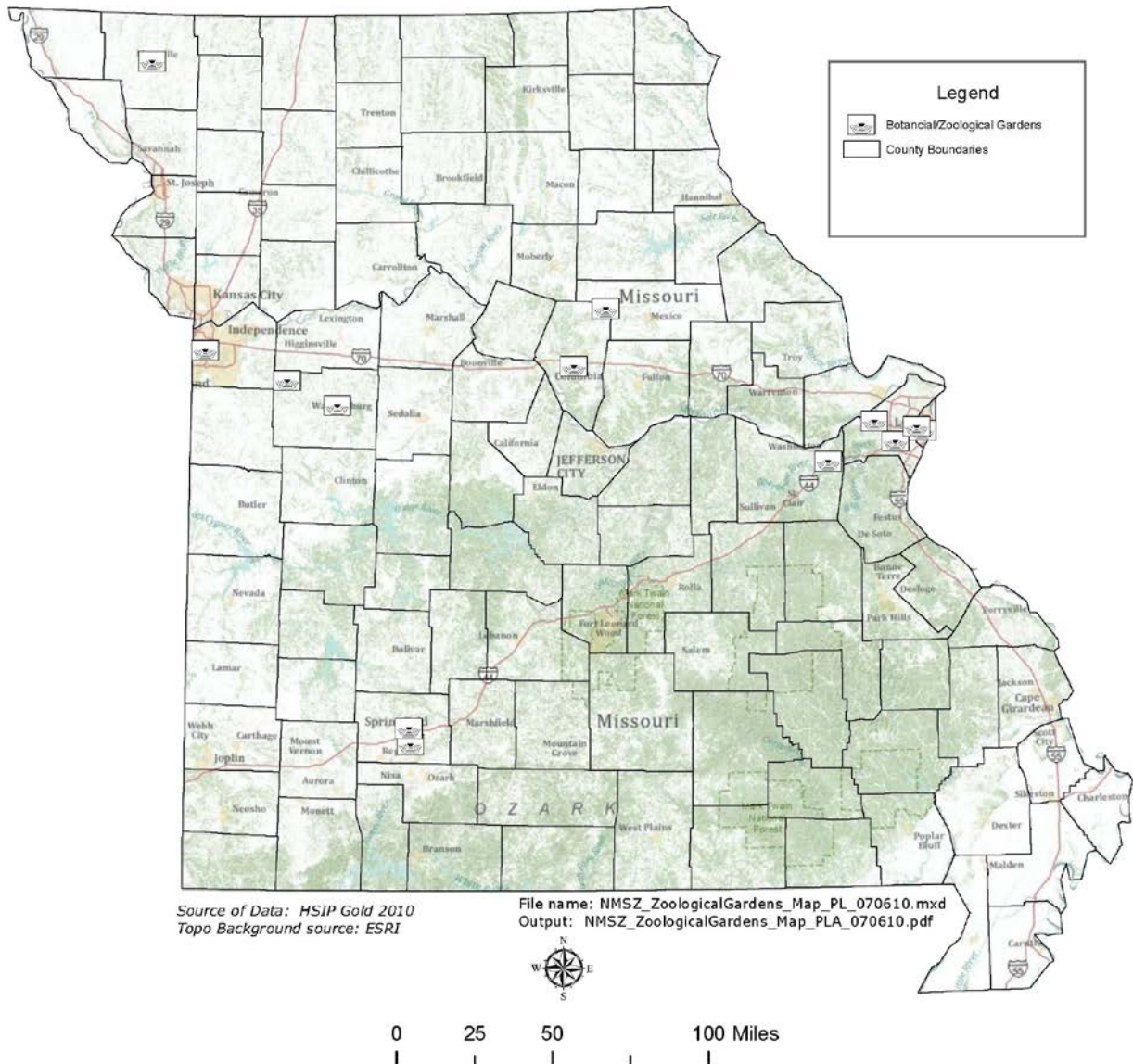


Figure C11-5 Feedlots

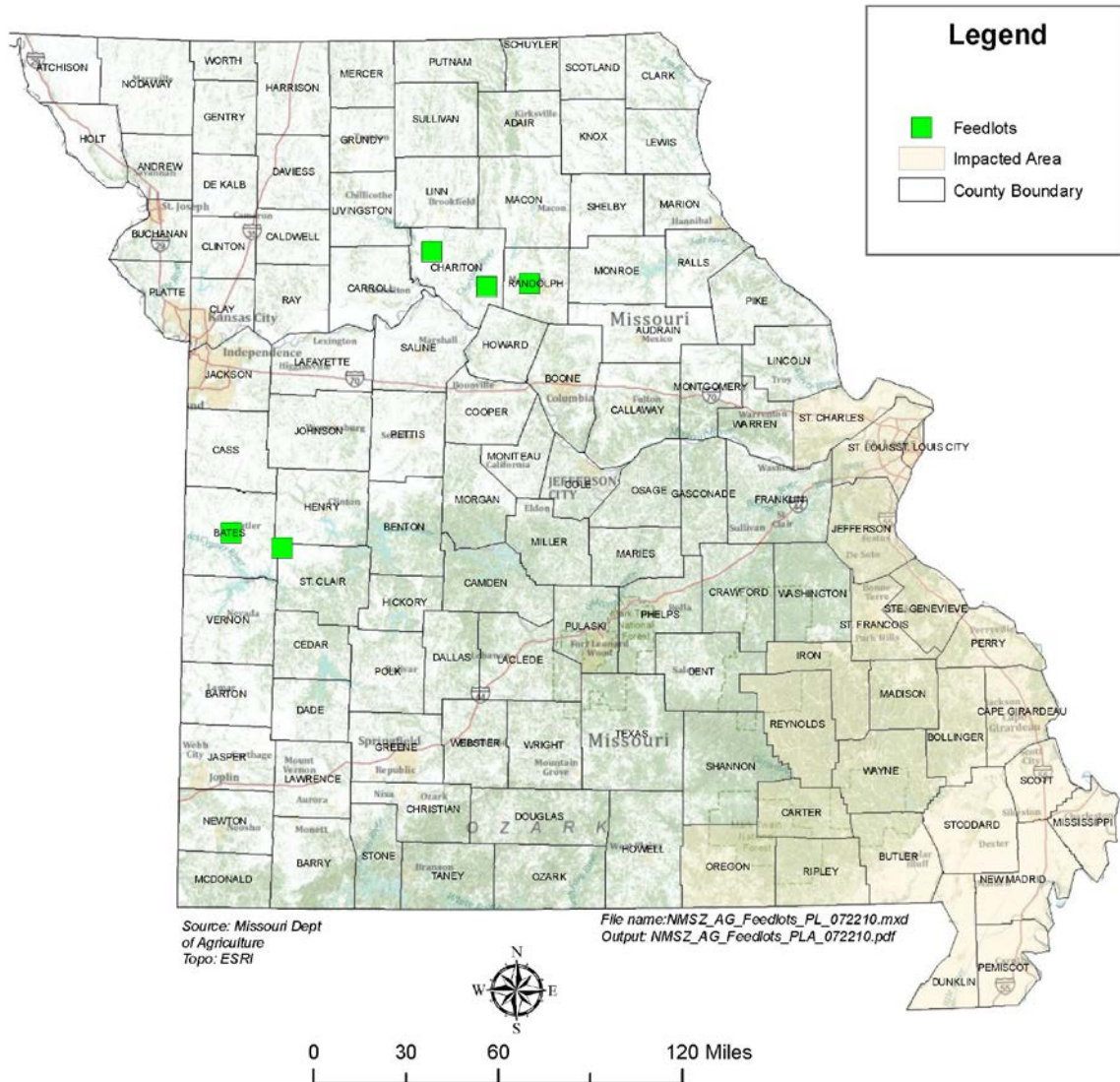
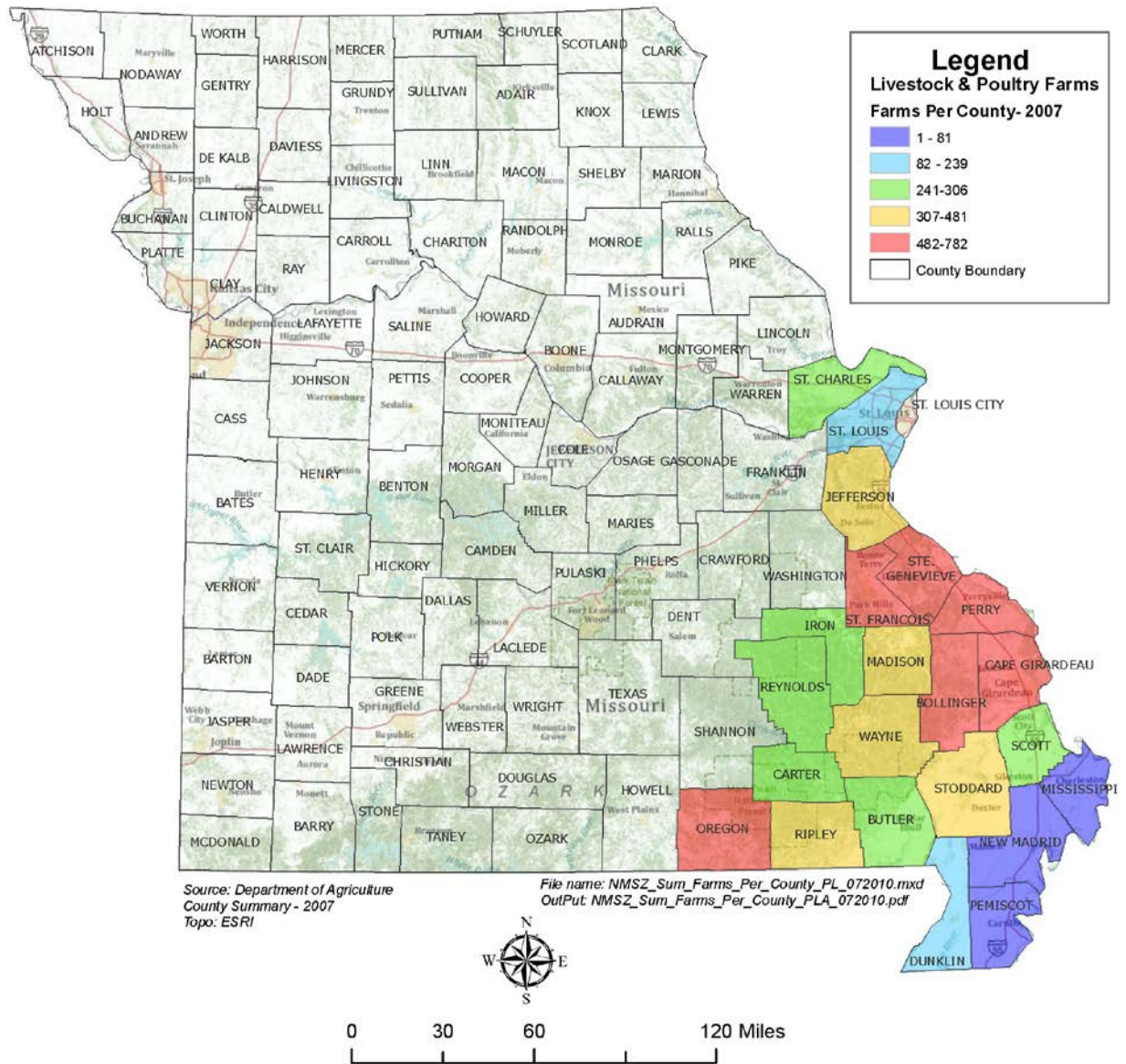


Figure C11-6 Farms in the Impact Zone



**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C12
ESF-12, Energy**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

This appendix to Annex C of the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) defines the concept of operations for Emergency Support Function-12 (ESF-12), which addresses joint local, state, and federal energy response operations following a catastrophic earthquake affecting the State. Significant energy resources lie within the boundaries of the NMSZ, including **REDACTED**. Power restoration will be essential to recovery of the economic and industrial base for the State of Missouri. Restoration of power will enable businesses to reopen and the population to rebuild, and will provide for a smooth transition to recovery.

Impacts to the energy system in the NMSZ may extend to energy supplies, systems, and components in other regions relying on the same system. Consequently, energy supply and transportation problems can affect intrastate, interstate, national, and international operations. Disruptions to these energy sources would occur due to ground movement and flooding. This could cause petroleum and natural gas product line breakage, downing of electrical transmission and distribution lines, and flooding or other physical damage to substations and other energy-related critical infrastructure. Disruptions could also occur due to the interconnections with energy sources throughout the NMSZ. Although an electrical generation facility may not sustain physical damage from the earthquake, cascading effects from generating facilities that are damaged could shut down that facility. Likewise with gas pipelines.

The ability to initiate immediate repairs to energy infrastructure will be impaired by road and bridge damage. This would significantly restrict petroleum suppliers' ability to respond to the affected area in order to provide fuel via tanker trucks. Power restoration teams would have difficulty responding and restoring power as well due to road and highway access restrictions.

The Missouri Public Service Commission (PSC), Missouri Department of Natural Resources (MDNR)-Energy Center, and United States Department of Energy (DOE) will coordinate and oversee a response, while the affected private cooperatives and municipal energy resource owners take the lead in restoration of infrastructure-related services after an incident occurs. As appropriate, private-sector entities are integrated into the ESF-12 planning and decision-making process.

Extensive coordination with investor-owned utilities and private-sector owners of the energy infrastructure in the area will be required. ESF-12 will move to resolve any issues encountered, and assist with timely and effective restoration of power.

According to modeling data from the Mid-America Earthquake (MAE) Center, a NMSZ earthquake is expected to directly impact 22 Missouri counties and the City of St. Louis. While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire State, including the 47 counties recognized by the State as vulnerable to negative impacts by a seismic incident. This OPLAN also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties nor the effects of aftershocks are provided unless denoted. Tables C12-1 and C12-2 list **REDACTED**. Figures C12-1 to C12-6 show **REDACTED**.

Table C12-1 Utility Pipeline Damage for Missouri – REDACTED

Table C12-2 Utility Facility Damage for Missouri – REDACTED

Figure C12-1 Missouri Transmission Line Network – REDACTED

Figure C12-2 Electric Grid – REDACTED

Figure C12-3 Pipelines Natural Gas – REDACTED

Figure C12-4 NPMS Pipeline – REDACTED

Figure C12-5 Pipeline Plan – REDACTED

Figure C12-6 Investor Gas Map – REDACTED

1.1 Purpose

This ESF-12 appendix details the ESF’s limitations, organization, and course of action to execute the roles and responsibilities assigned to the ESF during a NMSZ incident. This appendix identifies gaps, and aids the overall aim of Annex C and other annexes to enhance unity of effort and link existing plans. Specifically, this appendix provides the ESF-12 Coordinator with the basis for evaluating and accepting or returning mission assignments and tasks received from other operations in response to an earthquake in the NMSZ. ESF-12 ensures that during a catastrophic earthquake, coordinated response and consideration are provided for safety of life and for accessibility, assessment, and a strategy for restoration of critical energy supplies. To accomplish this, ESF-12 will:

- Work with the private sector to determine the extent of the damage to the infrastructure and the effects of the damage on the regional and national energy system.
- Assess the energy impacts of the incident and provide analysis of the extent and duration of energy shortfalls.
- Provide input to the prioritization plans and actions for restoration of energy during response and recovery operations.
- Coordinate with other ESFs to provide timely and accurate energy information, and recommend options to mitigate impacts.
- Facilitate restoration of energy systems through legal authorities and waivers.
- Provide subject-matter experts to the private sector to assist in the restoration efforts.

Objective: Restore critical energy infrastructure and public service

1.2 Considerations

The following considerations are specific to ESF-12. General considerations are included in Section 1.5 of the Base Plan.

- Though responsibility for this ESF lies within the MDNR Energy Center, PSC, and the DOE, the responsibility for establishing, maintaining and managing the restoration of energy resources falls upon the private sector, rural electric cooperatives and municipal energy utilities for coordination and support.

REDACTED

- A NMSZ earthquake would impact all of or some of Federal Emergency Management (FEMA) Regions IV, V, VI and VII. Mission assignments must be reviewed and evaluated as plausible on both a national and regional level.
- **REDACTED.**
- Basic services and resources relied on by residents in affected areas will be significantly disrupted. Hospitals and healthcare; transportation; water, sewer, electricity, and natural gas utilities; and gasoline and food outlets will not be available.
- FEMA Regions IV, V, VI, and VII will rely on the same response resources. Thus, coordination among the NMSZ Regions Regional Response Coordination Centers (RRCC) and the National Response Coordination Center (NRCC) will be a necessary and critical component to ensure response operations are integrated and resources are used in the most effective manner possible.
- Memorandums of Understanding (MOU) among Missouri and the other Region VII states Iowa, Kansas, and Nebraska (support states) will be in effect. Other states will respond via Emergency Management Assistance Compact (EMAC) requests.
- Initial situational awareness in the impacted areas will be difficult to obtain as communication infrastructure and/or the power to sustain communications will be damaged by the earthquake.
- Several factors, including time of day, epicenter, magnitude, duration, and aftershocks will compromise response operations. Seasonal weather conditions will significantly impact operations as well.
- Local governments have the primary responsibility to prepare for and respond to incidents and disasters. Local jurisdictions must be prepared to manage initial emergency activities for at least the first 96 hours through internal capabilities and/or mutual aid agreements, regardless of the size and scope of the incident. State government and the Federal Government will make every effort to provide additional life safety support as quickly as possible; however, state and federal resources may not be available in the early stages of an emergency.
- ESF-12 teams are comprised of responders who perform the ESF-12 mission at the respective response centers.
- Seasonal energy usage patterns vary significantly. While the importance of electrical supply is constant across seasons, natural gas and propane supply is critical in the winter months for heating.
- The time of year is relevant to energy usage patterns and people's schedule.
- Recovery will require coordination with multiple owners, operators, and personal users across multiple FEMA Regions, and will likely take greater than 30 days to restore in areas undergoing the most significant damage.
- **REDACTED.**
- **REDACTED.**
- **REDACTED.**

1.3 Assumptions

The following assumptions are specific to ESF-12. General considerations are included in Section 1.5 of the Base Plan.

- ESF-12 has the plan, resources, methods and coordination in place to coordinate restoration of critical energy infrastructure and public service to the primary impacted areas, contiguous areas and throughout the State of Missouri.
- Life-saving and life-sustaining efforts will be the primary mission of initial disaster operations.
- Utilities services and system interdependencies (food, fuel, natural gas, electricity, water, sewage, sanitation and communications) will be negatively impacted and disrupted.
- Delays in releasing gas from storage or lower than normal storage levels may negatively impact the supply available to the market.
- Electrical power outages will be significant and permanent damage to the infrastructure supporting this will significantly affect the timeline for restoration.
- Region wide electrical power loss would occur due to automatic grid protection measures and damage to the infrastructure.
- **REDACTED.**
- **REDACTED.**
- **REDACTED.**
- Initial outages could project throughout the Midwest, and potentially cascade into parts of the Southeast and Northeast of the United States.
- Regulated and unregulated partner representatives and federal and state partners may be at the Missouri State Emergency Operations Center (SEOC).

1.4 Limiting Factors

- Access to the affected area will be limited or completely cut off due to road and infrastructure damage.
- Competing requests for the same service and support will negatively impact all response agencies.
- The amount of damage to the energy infrastructure will have regional impacts, not just local or isolated impacts.

2.0 Mission

The ESF-12 mission is to facilitate restoration of damaged energy systems and components during incidents requiring a coordinated response. ESF-12 obtains, evaluates, and shares information on energy system damage; estimates the impact of energy system outages within affected areas; provides information concerning energy restoration; and facilitates restoration of energy systems through legal authorities and waivers. ESF-12 also provides technical expertise to the utilities, and helps government and private-sector stakeholders overcome challenges in restoring the energy system.

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases. Table C12-3 lists the three (sub)phases of Phase 2:

Table C12-3 Response Phase Operational Periods

Response Phase	Operational Period
2a – Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Employment/Sustained Response	E + 72 – E + 120 hrs +

The Response Phase and Operational Periods are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

3.1.1 General Concepts

Local municipals, co-operatives, and private energy providers—with help from the DOE, MDNR, and MPSE—will assess power infrastructure damage and access for emergency responder services, expedite power restoration, and de-conflict power restoration priorities. REDACTED.

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As part of the overall concept of operations and energy strategy, the timely sharing and reporting of accurate information is critical to successfully respond to and manage disruptions within the energy sector. ESF-12 obtains, evaluates, and shares information on energy infrastructure damage, and estimates the impact of energy system outages. ESF-12 also consolidates information and performs detailed analyses concerning the energy restoration process, including supplying projected schedules, restoration completion percentages, specific geographic restoration data, and other relevant information as appropriate. Because almost every aspect of society relies upon energy to function, this information is critical to the overall response effort.

- Critical Information Requirements specific to ESF-12 include:
 - Status of electrical generating facilities
 - Status of the transmission grid
 - Status of the distribution grid
 - Population without electric power
 - Status of natural gas transmission facilities
 - Status of the distribution pipeline
 - Population without natural gas
 - Status of gasoline and oil distribution systems
 - Establishment of power restoration priorities with Unified Coordination Group (UCG)
- ESF-12 provides the appropriate federal assistance and resources to enable restoration in a timely manner. ESF-12 execution is based on the following principles:
 - Serving as the focal point within the Federal Government for receipt of information on actual or projected damage to energy supply and distribution systems, requirements for system design and operations, and procedures for preparedness, restoration, recovery, and mitigation
 - In coordination with State and local entities, provide advice for energy restoration, assistance, and supply
 - Assisting industry, state, and local authorities with requests for emergency response actions as required to meet the nation's energy demands.
 - Assisting federal departments and agencies by locating fuel for transportation, communications, emergency operations, and national defense
 - Providing guidance on conservation and efficient use of energy to federal, state, and local governments, and to the public
 - Providing assistance to federal, state, and local authorities utilizing U.S. Department of Homeland Security (DHS)/FEMA-established communications systems

3.2.1 Phased Response Concepts

3.2.1.1 Phase 2a: Immediate Response

Purpose of Phase

To organize and create an effective, integrated targeted response identifying critical infrastructure, public service and critical system restoration based upon potential loss of life and the extent of critical infrastructure impacted.

End State of Phase

A rapid/immediate response has occurred, with effective processes in place for sustainment and restoration of energy and energy systems.

Private/Local Mission-essential Tasks

1. Local authorities evaluate impact on local systems.
2. Energy resource owners take the lead in the rapid restoration of infrastructure-related services after an incident occurs.
3. When appropriate, private-sector entities are integrated into ESF-12 planning and decision-making process.
4. Extensive coordination with investor-owned utilities and private-sector owners of the energy infrastructure in the area is required.
5. Facilitate any issues encountered, and assists with timely and effective restoration of power.
6. Coordinate with local affected areas and state and federal authorities for situational awareness.
7. Initiate coordination with all suppliers and energy support systems.

State Mission-essential Tasks

State Emergency Management Agency

1. Maintain communications with the Nuclear Regulatory Commission (NRC), the Missouri Department of Health and Senior Services (MDHSS), and nuclear facilities in responding to and recovering from radiological nuclear power plant emergencies, along with the MPSE and MDNR Energy Center.
2. Coordinate with the American Red Cross (ARC) and local emergency operations centers (LEOC) to identify emergency shelter power generation needs or their emergency power generation needs.
3. Coordinate with ESF-3 to identify wastewater generation needs.

Missouri Department of Natural Resources

1. In the event of a 6.5 M_w or greater earthquake impacting Missouri, the state ESF-12 lead, MDNR will be alerted using the Emergency Notification System who then notifies the 24-hour DOE, Emergency Operation Center. MDNR will self activate if made aware of the situation from other resources.
2. Notify the appropriate person/personnel at the Energy Center to activate and respond to the SEOC.
3. Deploy designated representatives or duly appointed alternates to the SEOC at SEMA.
4. Establish work assignments and schedules, consistent with the State of Missouri Energy Assurance Plan.
5. The Energy Center will not field deploy, but will staff the SEOC.
6. Coordinate reconnaissance and assessment with the use of air and ground reports from any source identifying resources required to restore energy systems.
7. Obtain information from state and local emergency response/damage assessment teams to the disaster areas in order to determine possible affected areas, industries, and resources needed.

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8. Collaborate with all partners and DOE response teams in assessment of energy system damage and monitor repair from public/private partners and Federal Power Marketing Administration.
9. Ensure timely gathering and dissemination of accurate information during the energy shortage.
10. Keep the public informed and advised about proper emergency response, coordinating with ESF-15.
11. Establish effective communication with public/private partners.
12. Contact the ESF-12 state, local, regulated and non-regulated public/private industry partners and obtain situational awareness. Partners include:
 - a. Missouri Department of Transportation (MoDOT) Office of Pipeline Safety
 - b. Missouri Public Utility Authority (MPUA)
 - c. Mid West Independent Transmission System Operators (MISO)/Regional Transmission Organization (RTO)
 - d. Regulated partners through the PSC
 - e. Non-regulated partners through the MDNR
 - f. Missouri State Highway Patrol (MSHP)
13. Implement in part or in whole, a Continuity of Operations Plan (COOP) to assure that the appropriate staff are mobilized to staff the SEOC, a Disaster Field Office (DFO), or an alternate work site, depending upon the circumstances of the emergency event.
14. Contact electric companies, natural gas companies, nuclear-based electric generation plants(Union Electric Company), COOPs propane terminals and retailers and transportation fuel providers serving the affected area to obtain information about damage and assistance needed in their areas of operation.
15. Maintain communications with private-sector providers of other energy and transportation fuels, SEMA, PSC, and other support agencies and organizations in responding to and recovering from emergencies regarding shortages and disruptions in the supply of other private-sector energy and transportation fuels affecting the public.
16. Establish priorities and develop strategies for the initial response. Administer statutory authorities for energy priorities.
17. Monitor - procedures followed by individual utilities during energy generating capacity shortages to ensure statewide action and communication.
18. Recognize and identify needs for:
 - a. Establishment of delivery routes and methods
 - b. Locations of fuel and energy resources
 - c. Determination of level, degree, and capability of response
19. Coordinate and establish priorities based upon life safety and critical infra-structure and systems priority issues. The identification process will begin by locating distribution sites, staging areas, and storage facilities for diesel, gasoline and jet fuel, with following priority criteria in mind:
 - a. First responders
 - b. Essential medical operations

- c. Public water and sanitation
 - d. Shelters
 - e. Supply PODs
 - f. Commercial food and fuel operations
 - g. Commercial telecommunications nodes
 - h. Critical government facilities
20. Activate pre-existing contracts and pre-event waiver coordination and application.
21. Facilitate federal level coordination.

Missouri Public Services Commission

1. Activate upon notification by SEMA via personal cell phones/pagers, or self-activate if made aware from other resources.
2. Staff the ESF-12 table at the SEOC with MDNR Energy Center staff.
3. Contact the ESF-12 regulated public/private partners and obtain situational awareness.
4. Notify or begin communication, dissemination, and coordination with other ESF-12 support agencies immediately and as appropriate, including:
 - a. Regulated providers
 - b. Unregulated providers
 - c. Federal partners
5. As appropriate, report damage to systems and release critical public information and coordination with ESF-15, External Affairs.
- 6. Redacted.**
7. Determine Missouri's generating capacity, expected peak loads, expected duration of emergency event, explanation of utilities' actions, and recommendations of state and local actions in support of the utilities.
8. Maintain communications with electric utilities, SEMA, and other support agencies and organizations in responding to and recovering from emergencies regarding electric generating capacity shortages, electric generating fuel shortages, transmission and distribution line outages, and electrical service outages affecting the public.
9. Coordinate information and requests for assistance with the private-sector Electric Reliability Organization (ERO) and various associations that represent portions of the energy sector.

Federal Mission-essential Tasks

U. S. Department of Energy

1. Support FEMA Pre-scripted Mission Assignment (PSMAs) documents for a 6.5 magnitude earthquake event
2. Act as the federal coordinating agency for ESF-12 and as the primary agency for providing resources at the RRCC, Joint Field Office (JFO), and State Area Coordination Centers (SACC).
3. Assist industry and government with requests for emergency response actions required to meet energy sector demands.

4. Analyze impacts to the national infrastructure and communicate and disseminate to appropriate response partners.
5. Analyze and report on interdependency issues that may arise as these apply to all affected regions.
6. Provide technical assistance, coordination of transportation resources, support at responder camps, and priority handling of ESF-12 cargo in order to support restoration of the power grid, as determined by the UCG.

3.2.1.2 Phase 2b: Deployment

Purpose of Phase

Implement a comprehensive, functional, integrated response identifying critical infrastructure, public service and critical system restoration needs based upon potential loss of life, life safety, and number of critical infrastructure impacted.

End State of Phase

PSC, MDNR Energy Center, and DOE have coordinated and overseen a response, while private cooperatives and municipal energy resource owners have taken the lead in rapid restoration of infrastructure-related services following the incident. Private-sector entities are integrated into the ESF-12 planning and decision-making process.

Private Sector Mission-essential Tasks

1. Coordinate with investor-owned utilities, municipal utilities, cooperatives, bulk distribution terminals, and private-sector owners of the energy infrastructure in the affected area.
2. Energy resource owners take the lead in rapid restoration of infrastructure-related services after an incident occurs.
3. Integrate private-sector entities into ESF-12 response planning and decision-making processes at the SEOC, as appropriate.
4. Coordinate through the Business Emergency Operations Center (BEOC) to provide technical assistance, and to assist in determination of priorities and support if needed.
5. Assist with establishment of private-sector power generation teams.
6. Ensure that AmerenUE's "auto-push" information is provided to MDNR.
7. Calculate and convey all resource shortfalls and estimated local impacts, assessing need for additional assets and requesting these from the SEOC.
8. Continue to provide situation updates, assessments, and information dissemination.
9. Monitor reestablishment/establishment of the generation and transmission plants (6) that supply power to 41 cooperatives within the State.

State Mission-essential Tasks

Missouri Department of Natural Resources Energy Center

1. Provide assignments to designated representatives or duly appointed alternates to the SEOC at SEMA.
2. Continue to establish work assignments and schedules, consistent with the State of Missouri EAP.

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3. Assess reconnaissance and assessment with use of air and ground reports from any source.
4. Coordinate resources required to restore energy systems.
5. Obtain information from state and local emergency response/damage assessment teams.
6. Assess reports from disaster areas to identify possibly affected areas and industries, and resources needed for energy restoration.
7. Continue to facilitate collaboration with all partners and DOE response teams in assessment of energy system damage.
8. Continue to monitor repair from public/private partners and Federal Power Administration.
9. Continue to provide current and updated public information, and advise the community about proper emergency response, coordinating with media relations and External Affairs.
10. Coordinate effective communication with public/private partners.
11. Maintain communications with private-sector providers of other energy and transportation fuels, SEMA, the PSC and other support agencies and organizations in responding to and recovering from emergencies regarding shortages and disruptions in the supply of other private-sector energy and transportation fuels affecting the public.
12. Implement established priorities and develop strategies for the initial response.
Administer statutory authorities for energy priorities.
13. Continue to monitor procedures followed by individual utilities during energy generating capacity shortages to ensure statewide action and communication.
14. Monitor the need and implementation for federal-level coordination.

Missouri Public Services Commission

1. Address any issues encountered, and assist with timely and effective restoration of power.
2. Establish effective internal/external communications by use of:
 - a. Cell phones (some personal), pagers, and satellite communication capabilities
 - b. Comprehensive internal and external communications to private/public partners in the field
 - c. Regulated and unregulated partner representatives at the SEOC for face-to-face communication
 - d. A 24-hour emergency hotline with which to contact principals
3. Obtain and coordinate situational awareness reports from private, local, and state field resources.
4. Activate Continuity of Operations and Continuity of Government Plans should the need arise.
5. Have Emergency Management Assistance Compacts (EMAC) in place, and establish relationships with the Energy Assurance Association (EAA) and National Association of State Energy Officials (NASEO), and tie into the EAA Coordinator within each state.
6. Activate EMAC (see attached list of request documents).
7. Monitor reestablishment/establishment of the generation and transmission plants (6) that supply power to 41 co-ops within the State.
8. Respond to specific energy shortage conditions, and assist in restoring equilibrium of supply as expeditiously as possible.

9. Activate specific responses designed to restrain demand and manage energy supply, particularly responses that rely on voluntary participation.
10. Continue to monitor provision of energy to essential services.
11. Establish appropriate legal authority to direct and respond to energy shortfalls.

Federal Mission-essential Tasks

U. S. Department of Energy

1. Support Federal Mission Assignments to activate response operations in support of state-requested Action Request Forms (ARF) and requests for assistance (REC A), and/or to support state/federal operations.
2. Contact the ESF-12 team by using either the ESF response lists or the Telephone Notification System (TNS).
3. Invoke Federal authorities to restrict fuel use and limits flow as needed.
4. Using TNS or an e-mail, request the cadre of ESF-12 responders to notify the EROD of their availability.
5. Send deployment orders and a deployment schedule on a daily basis when the ESF-12 team is activated.
6. Provide technical assistance, coordination of transportation resources, support at responder camps, and priority handling of ESF-12 cargo in order to support restoration of the power grid, as determined by the UCG.

3.2.1.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

To effectively accomplish:

- Oversight and coordination of ESF-12
- Communication with public/private partners
- Assessments from public/private partners and the Federal Power Marketing Administrations.

Establish an effective response to the affected area with supporting resources and development of a comprehensive and strategic response and recovery plan for all critical infrastructure and public services.

End State of Phase

Appropriate deployment has occurred of local, state, and federal energy assets (including equipment and personnel to support ESF-12), and a comprehensive process is in place for complete restoration of most systems and successful re-establishment of as many systems as possible. Less-affected sites on priority lists are being restored and becoming functional.

Private and Local Sector Mission-essential Tasks

1. Continue assessment and strategy for short-term restoration and long-term solutions.
2. Emphasize sustainment of compromised systems, driven by the private sector.
3. Arrange for individual generation and power routing for cooperatives and municipals.
4. Establish priorities for refueling electrical and natural gas supplies.

5. Establish a process for personnel and personal support requiring provision of basic needs and specification of tours of duty.
6. Coordinate information and requests for assistance with private-sector entities.

State Mission-essential Tasks

Missouri Department of Natural Resources

1. Update state and local news organizations with assessments of energy supply, demand, and requirements to repair or restore energy systems.
2. Keep accurate logs and other records of emergency responses.
3. Draft recommendations for after-action reports (AAR) and other reports as appropriate.
4. Review recovery actions and develop strategies for meeting local and state energy needs. This includes consideration and implementation of sustainable (re)development strategies and actions to make Missouri communities less susceptible to future disasters.
5. Inform appropriate state and local news organizations about generating capacity shortfalls through ESF-15.
6. Communicate with and monitor state, local, utility, and energy suppliers' response actions.
7. Receive and assess requests for aid from local, state, and federal agencies; other energy offices; and energy suppliers and distributors.
8. Maintain communication with utility, fuel, and other energy representatives to determine response and recovery needs.

Missouri Public Services Commission

1. Coordinate information and requests for assistance with the following entities:
 - a. Electricity, oil, and natural gas Sector Coordinating Councils
 - b. ERO and various trade and industry associations that represent portions of the energy sector
2. Evaluate potential statewide implications and resolutions.
3. Continue to address energy issues in order to implement timely restoration of critical energy systems.
4. Initiate and continue to issue permits and waivers.
5. Continue coordination among all public/private partnerships, local municipalities, private companies, and cooperatives.
6. Continue oversight of critical, temporary, functional, and operational repairs.
7. Begin/continue assessment for long-term recovery and systems restoration and sustainment.
8. Maintain communication with utility, fuel, and other energy representatives to determine response and recovery needs.
9. Determine Missouri's generating capacity, expected peak loads, and expected duration of emergency event; identify utilities' emergency response actions, and formulate recommendations for state and local actions in support of the utilities.

Federal Mission-essential Tasks**U. S. Department of Energy**

1. Analyze impacts to the national infrastructure and communicate and disseminate to appropriate response partners.
2. Analyze and report on interdependency issues that may arise as these apply to all affected regions.
3. Assists industry and government with requests for emergency response actions required to meet energy-sector demands.
4. Monitor the status of active mission assignments; continue to accept mission assignments.
5. Maintain staffing per FEMA requirements for the activated response center.
6. Continue assessment for long-term recovery and systems restoration and sustainment.
7. Coordinate with ESF-15 – External Affairs to appropriately disseminate emergency public information.

4.0 Oversight, Coordination and Communications**4.1 Coordinating Agencies (Primary)****4.1.1 Private**

- Municipal utilities
- Mid West Independent Transmission System Operators/Regional Transmission Organization
- Entergy (RTO)
- Regulated partners through the Public Services Commission
- Non-regulated partners through the MDNR
- Rural Electric Cooperative
- Citizen’s Electric Cooperation

4.1.2 Local

- Missouri Public Utility Authority
- Other Municipals

4.1.3 State

- Missouri Department of Natural Resources—Energy Center
- Missouri Public Services Commission

4.1.4 Federal

- United States Department of Energy

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Incident command
- Local Public Works

4.2.2 State

- Missouri Department of Transportation
- Missouri Department of Economic Development
- Missouri National Guard
- Missouri Department of Transportation (MoDOT) Office of Pipeline Safety
- Missouri Department of Natural Resources

4.2.3 Federal

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Homeland Security
- Department of the Interior
- Department of Labor
- Department of State
- Department of Transportation
- Environmental Protection Agency
- Nuclear Regulatory Commission
- Tennessee Valley Authority

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The Emergency Management Assistance Compact (EMAC) offers state-to-state assistance during governor-declared state of emergency (receiving state). During a NMSZ incident, it is assumed that EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

- The Governor of Missouri will declare a disaster

- SEMA will open an EMAC event in the EMAC Operations System
- Missouri will request assets based on mission assignment
- The assisting state will detail the available assets and estimated costs back to SEMA
- SEMA will approve the resource and cost
- The resource from the assisting state will mobilize and deploy.

For resources that are not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

Table C12-4 lists resources that may be requested for utilization in Missouri from non-impacted states through the EMAC system by pre-incident agreement. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C12-4 Pre-scripted EMAC Request

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact

5.2 Pre-scripted Requests for Federal Assistance

Table C12-5 lists resources that may be requested through the Federal Government via FEMA Mission Assignments. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C12-5 Pre-scripted Action Request Forms

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Administrator	SEMA		External Affairs Teams		
	Administrator	SEMA		State Community Relations Teams		
	Administrator			Local Community Relations Teams		

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Appendix C13 – ESF-13 Public Safety

Joint Missouri & Region VII Response Operations Plan

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE
OPERATIONS PLAN**

**Annex C, Appendix C13
ESF-13 – Public Safety**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

This Appendix to Annex C of the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for joint local, state, and federal public safety operations following a catastrophic earthquake in eastern Missouri.

Data regarding a potential NMSZ incident were developed by the Mid-America Earthquake (MAE) Center. Supplemental loss estimation data are based on the Federal Emergency Management Agency's (FEMA) December 2005 Hazards United States (HAZUS-A) model HM Earthquake Event Report, Southeast Missouri. Provisions set forth in this appendix are based on a cumulative review of direct damage and loss of functional capabilities associated with infrastructure, social impacts, and direct economic losses estimated by the MAE Center and supplemental data.

All counties in Missouri would be impacted by a NMSZ incident, though the impacts would be less severe outside the area identified by the MAE Center. As a no-notice incident, this appendix is a flexible document that provides initial (incident to 120 hours+) organization and automatic response functions while allowing stakeholders at all levels to gather situational awareness and muster necessary resources to save and sustain lives, protect property, and promote economic and social recovery.

Under the State of Missouri Emergency Operations Plan (SEOP), Annex A, the Missouri State Highway Patrol (MSHP) has primary responsibility for public safety as the lead agency for ESF-13. The SEOP specifies security activities and emergency operations necessary to coordinate public safety efforts to facilitate a rapid return to pre-emergency conditions and procedures for implementing supplemental federal disaster assistance available under PL 93-288, the Robert T. Stafford Disaster Relief Act of 1988, as amended by Public Law 100-707. Additional information is included in the MSHP Patrol Emergency Operations Plan (EOP).

Under the National Response Framework (NRF), the U.S. Department of Justice (DOJ) is designated as Coordinator and Primary Agency for public safety. At the federal level, DOJ, in cooperation with the Federal Emergency Management Agency (FEMA), will provide a mechanism for coordinating support to local and state governments, non-governmental organizations (NGO), and the private sector to enable community recovery from a catastrophic NMSZ incident.

According to modeling data from the MAE Center, a NMSZ earthquake is expected to directly impact 22 Missouri counties and the City of St. Louis. While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire State, including the 47 counties recognized by the State as vulnerable to negative impacts from a seismic incident. This OPLAN also acknowledges that NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties nor the effects of aftershocks are provided unless otherwise noted. A brief summary of expected impact is as follows:

- 6.5 million tons of debris created including about 2.9 million tons of brick, wood, and other and about 3.6 million tons of steel and concrete
- 14,125 casualties
- 686 fatalities
- 87,000 buildings damaged; 44,000 buildings completely destroyed.

Due to the severity of the incident and the uncertain impacts to overall law enforcement capabilities within affected counties, additional law enforcement personnel will be necessary to support critical public safety operations. An estimate of law enforcement resource requirements is provided in Table C13-1.

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Table C13-1 Estimated Law Enforcement Resource Requirements

County	Population (2009 Census)	General Security in the Impact Zone
Bollinger	11,841	7
Butler	41,471	25
Cape Girardeau	73,957	44
Carter	5,870	4
Dunklin	31,039	19
Iron	9,943	6
Jefferson	219,046	131
Madison	12,341	7
Mississippi	13,266	8
New Madrid	17,480	10
Oregon	10,291	6
Pemiscot	18,193	11
Perry	18,847	11
Reynolds	6,202	4
Ripley	13,395	8
Saint Charles	355,367	213
Saint Francois	63,884	38
Saint Louis	992,408	595
Saint Louis City	356,587	214
Sainte Genevieve	17,542	11
Scott	40,855	25
Stoddard	29,069	17
Wayne	12,392	7
Total	2,371,286	1,423

Public Safety Need	Rate	Officers Needed	Notes
Shelter Support	6/500 person	504	Shelters in Missouri: 84
Traffic/Evacuation (within impact zone)	12/10,000	1,010	Traffic control
Force Protection	1/50 responders	900	45,000 responders
Points of Distribution (POD)	5/POD	115	1 POD/county
Respite Sites (outside of impact zone)	12/site	84	7 sites
General Security (outside of impact zone)	2/10,000	723	Added security for influx
Emergency Operations Center (EOC) Security	3/EOC	141	Includes 47 counties
Base Camps	8/1,000	360	45,000 responders
Medical Field Hospitals	6/hospital	36	6 hospitals
Staging Areas/State Area Coordination Centers	6/site	720	20 sites
Traffic/Evacuation (outside)	6/10,000	505	Highway support
Airport Security for major passenger airports	20 per	80	STL, MCI, SGF, and COU
Total		5,179	---

Grand Total*	6,602
*This number represents the number of officers needed beyond existing capabilities.	

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Appendix C13 – ESF-13 Public Safety

Joint Missouri & Region VII Response Operations Plan

All large scale evacuations will be overseen by the Evacuation Management Team (EMT) from the State Emergency Operations Center (SEOC). The EMT is a multidisciplinary team which can support the evacuation efforts, make recommendations to the Unified Command Group (UCG), and coordinate with local jurisdictions. The composition of the EMT is listed in Table C13-2. The EMT will be actively engaged in assessing the impact to jurisdictions and developing a course of action for conducting evacuation operations.

Table C13-2 Evacuation Management Team Composition

Agency Represented	ESF-#	Agency Represented	ESF-#
Department of Public Safety	ESF-13	Missouri Department of Social Services (MDSS)	ESF-6
Public Information Officer (PIO)	ESF-15	Missouri Department of Health and Senior Services (MDHSS)	ESF-8
State Emergency Management Agency (SEMA)	ESF-5	Missouri State Highway Patrol (MSHP)	ESF-13
Missouri Department of Natural Resources (MDNR)	ESF-10	Missouri National Guard (MONG)	N/A
Missouri Department of Transportation (MoDOT)	ESF-1	Missouri Department of Mental Health (MDMH)	ESF-6
Voluntary Organizations Active in Disaster (VOAD)	ESF-6		

Localized evacuation will be the responsibility of the local jurisdiction. Once a regional evacuation has been implemented by the EMT, the overall concept of operations is outlined in Appendix C6 to Annex C. Throughout this process, the EMT and the Local Emergency Management Departments will coordinate efficient deployment of resources, maximize utilization of available evacuee shelter capacity, and effectively address modifications to evacuation routes.

1.1 Purpose

The purpose of this Appendix is to provide objective-specific information for the OPLAN. This Appendix:

- Details limitations, organization, and courses of action to execute roles and responsibilities assigned to ESF-13 during a NMSZ incident
- Identifies gaps and seams
- Enhances unity of effort and links existing plans.
- Specifically, this Appendix presents a NMSZ-specific public safety operations plan specifying integrated activities among the DOJ, FEMA Region VII, federal ESF-13 partners, MSHP, SEMA, other critical state agencies, and local responders throughout Missouri. This appendix provides an overview of supporting activities and how partners will perform public safety missions in support of Missouri under the National Response Framework (NRF) and the 2010 OPLAN. This appendix also provides operational concepts unique to catastrophic earthquake event planning and response, and assigns responsibilities to state and federal agencies to meet the needs of local governments following a seismic event. This appendix is devised to support the following objective as defined by the Region VII Senior Leadership Steering Committee (SLSC) and the ESF-13 Integrated Working Group (IWG):

Objective: Provide security for the general population and first responders

This appendix is organized to:

- Identify components of the law enforcement services delivery structure
- Provide a concept of operations for law enforcement
- Outline support responsibilities and potential resource needs during public safety emergency operations during a major earthquake disaster.

1.2 Considerations

Life saving and life sustaining measures will be the primary focus during the response phase of a NMSZ incident. Public safety considerations are as follows:

- Public safety response operations must leverage all available resources including local, state, federal, private, and volunteer in order to meet incident needs. Early integration of public safety authorities into operations is essential.
- While the DOJ, FEMA, and MSHP have lead roles in facilitating and optimizing use of emergency response resources, they will rely on support agencies to provide required resources. Participation in a coordinated emergency management effort is critical to achieve the most efficient, effective results.
- Federal agencies providing public safety assistance under independent authorities to state and local governments, the private sector, and individuals must coordinate needs assessments and identification, and resolution of all issues through emergency management to contribute to the joint information gathering effort.
- Federal, state, and local governments will work jointly to define and address risk and response priorities.
- Federal support will be tailored based on the type, extent, and duration of the incident, and on availability of federal resources.
- All correctional facilities, including county detention centers, must identify receiving facilities and work with other public safety officials to effectively transport prisoners to those facilities.
- The State of Missouri and the United States Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) have identified all firearms dealers and armament manufacturing facilities in the affected areas, and anticipate the need to assist local law enforcement with securing the weapons in those facilities. Figures C10-1, C10-2, C10-3, C10-4, and C10-5 on the following pages indicate locations of facilities of concern relative to public safety operations.
- Mass sheltering will occur when large segments of the population are displaced from their homes for extended periods of time following a disaster. While disasters begin and end locally, it is the duty of the State and its partners to assist local jurisdictions in this process, including provision of appropriate security at shelters and other support facilities.
- Local jurisdictions may need assistance in securing government facilities and assets. Public safety agencies assisting local law enforcement agencies should be prepared to protect and save lives first, protect citizens second, and protect property as a third responsibility.

Figure C13-1 Local Law Enforcement Facilities

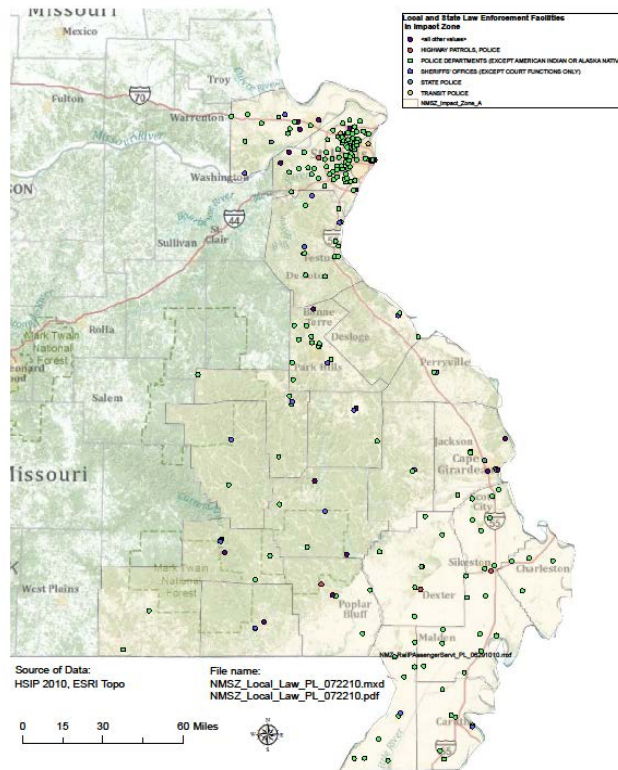


Figure C13-2 Federal Law Enforcement Facilities

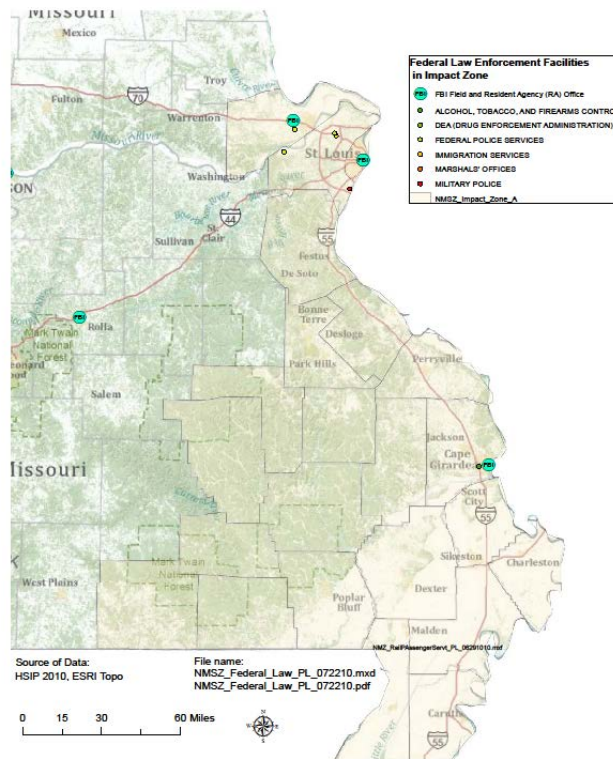


Figure C13-3 Jails and Prisons

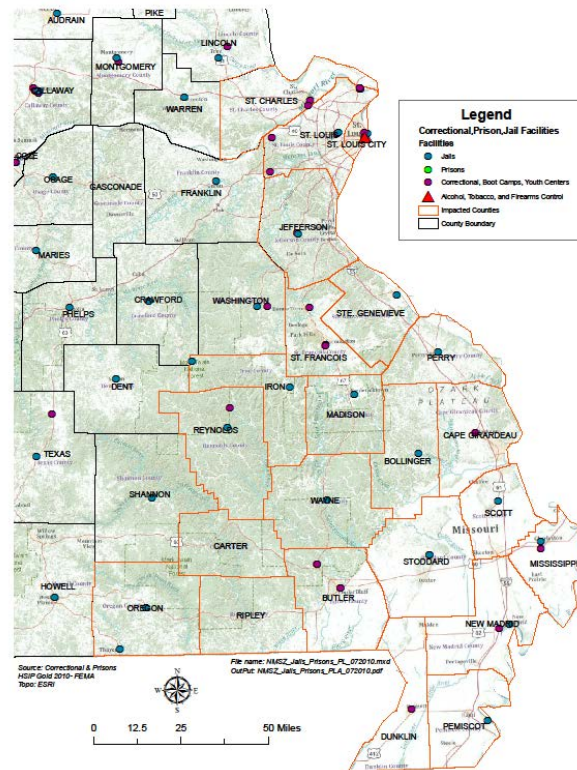


Figure C13-4 Missouri Firearms Dealers

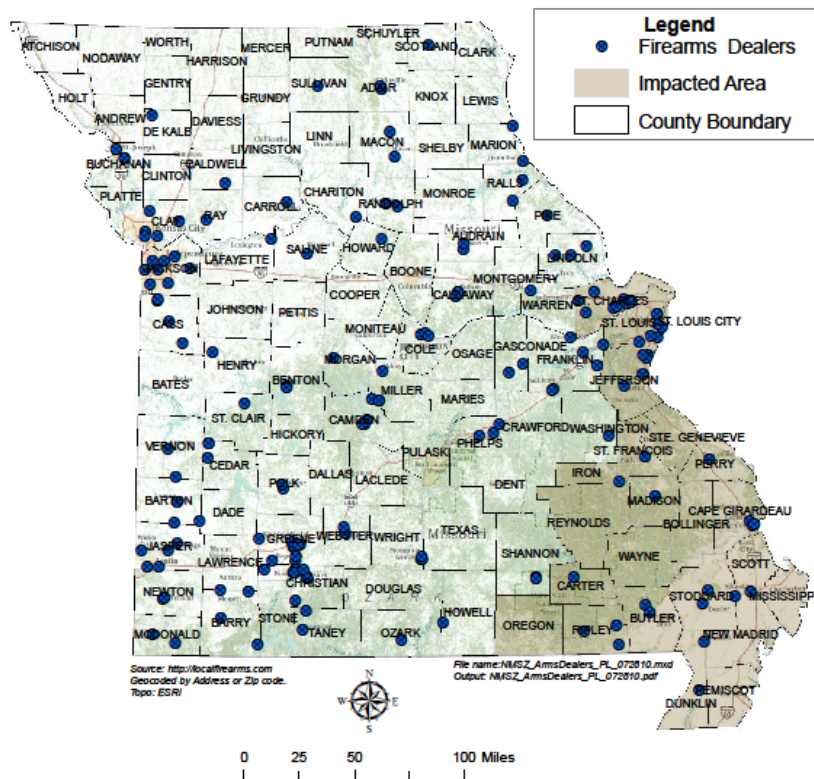
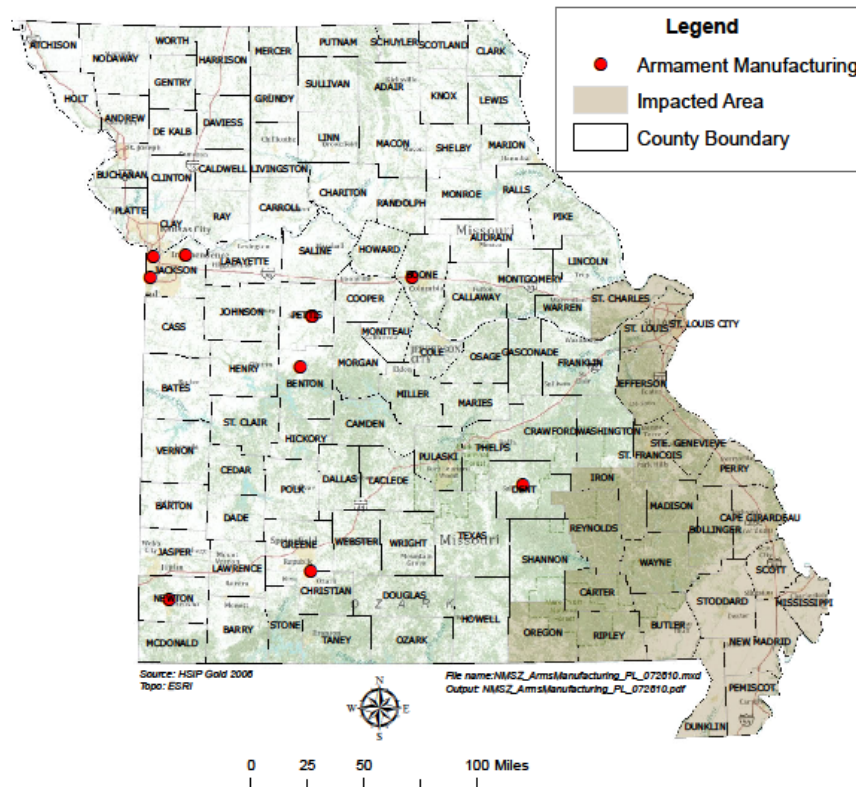


Figure C13-5 Missouri Firearms Manufacturing



1.3 Assumptions

Assumptions specific to public safety are as follows:

- During a disaster, local and state law enforcement personnel will respond according to this OPLAN.
- The scope and scale of public safety operations will tax and exceed local and state law enforcement capabilities.
- Damage to transportation routes will hamper arrival of supplemental law enforcement resources.
- Prisons and jails will be directly affected by the incident, and corrections officials will require assistance to secure facilities and prisoners.
- Local law enforcement personnel (county sheriff and municipal police) have major priority response roles that may impede their ability to perform public safety duties.
- In-state mutual aid resources (local, county, and state) will begin to arrive within 8 hours after the incident occurs.
- Shelters operated by local governments and other agencies, including those run by the American Red Cross (ARC), will require security personnel.

1.4 Limiting Factors

- Local law enforcement will be overwhelmed with activities related to life safety, search and rescue (S&R), public order, and security of critical infrastructure facilities. Many law enforcement personnel will be victims themselves leaving some jurisdictions with partial or no local law enforcement services.
- Law enforcement resources will be requested by all states affected by the earthquake. Assistance from resources outside affected areas will require time to mobilize.
- A significant number of public safety resources will be immediately affected by the incident causing a delay in staffing public safety positions.
- Damage to main transportation routes will hamper all tactical response operations.
- Emergency Management Assistance Compact (EMAC) or federal response resources will require forward logistical support that may not be established for 72 hours or more.
- Access control for affected areas, including credentialing and access verification for first responders, must be established to support public safety response operations.
- Personnel to support correctional facilities will be limited and will require special consideration.

2.0 Mission

The mission of the joint state/federal response organization is to save and sustain human life, minimize suffering, stabilize and restore critical infrastructure and set the conditions for recovery following a catastrophic earthquake in the State of Missouri. This appendix sets forth provisions and mission-essential tasks to organize local, state, and federal law enforcement agencies and procedures that enable them to provide services during a catastrophic incident. The combined resources of the law enforcement agencies within the State of Missouri are well prepared to address emergency situations. However, a catastrophic earthquake will exhaust public safety resources before the situation is stabilized and will require additional assistance through mutual aid, EMAC, and/or federal resources.

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases of execution. The sub-phases of Phase 2 are identified in Table C13-3.

Table C13-3 Response Phase Operational Periods

Response Phase	Operational Period
2a – Activation/Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Sustained Response	E + 72 – E + 120 hours +

The response phase and operational periods are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

3.1.1 General Concepts

Law enforcement activities described in this appendix extend beyond daily activities and involve extraordinary situations that may exhaust all available local resources and require assistance from other jurisdictions. Law enforcement agencies lead and control a variety of response operations including but not limited to:

- Securing sites dedicated to supporting response operations, including Points of Distribution (POD), shelters, field hospitals, staging areas, and morgue sites.
- Securing CI/KR, including government facilities and specialized private facilities such as power plants, laboratories, and hospitals.
- Securing other public and private property
- Maintaining traffic and crowd control
- Maintaining access control to the incident scene and isolation of evacuated area(s)
- Providing force protection for all response and emergency management personnel and resources in transit and upon arrival
- Protecting citizens and property
- Establishing clear command, control, and coordination structures for response operations at the sub state-level (State Area Coordination Centers)
- Coordinating interoperable communications among all response agencies
- Coordinating with ESF-15 to facilitate timely and accurate release of emergency public information.
- Disseminating critical intelligence and assessment information through the Missouri Information Analysis Center (MIAC).

The primary responsibility for ensuring public safety and other law enforcement activities rests with local jurisdictions. During a disaster, mutual aid agreements can provide additional resources to affected areas from neighboring communities. The State of Missouri only supplements local efforts under the following conditions:

- At the request of the local law enforcement entity.
- No local authority exists.
- The State has statutory authority.

The Missouri Department of Corrections (MDC) controls all state correctional facilities. When a correctional facility is threatened by a disaster, MDC implements and controls evacuation of offenders from the facility.

3.1.1 Phased Response Concepts

3.1.1.1 Phase 2a Immediate Response

Purpose of Phase

The purpose of this phase is to notify and activate all ESF-13 response organizations based on defined automatic activation thresholds. Achieving these goals will provide information to define incident-specific ESF-13 priorities and to set an initial course for deployment of assets. Affected local public safety agencies will activate all personnel who will report to their designated agency. The SEOC will activate and all state law enforcement agencies and law enforcement agencies from unaffected areas will activate personnel in accordance with local and state response plans.

End State of Phase

The desired end state of this phase is activation of all able local and state public safety agencies and activation of FEMA's Regional Response Coordination Center (RRCC) to coordinate local, state, and federal joint response efforts.

Local Mission-essential Tasks

Local Law Enforcement

1. Activate local emergency operations plans (LEOP).
2. Activate local public safety personnel and establish the Incident Command System (ICS).
3. Begin the mission of protecting lives, restoring order, providing emergency services, protecting property, and securing affected jurisdictions.
4. Provide security input into an Incident Action Plan (IAP). Disseminate the plan with specific roles and responsibilities to public safety agencies in each jurisdiction.
5. Coordinate with the SEOC and the MSHP.
6. Assess damage to public safety assets and disseminate critical information to SEOC.
7. Prepare list of critical law enforcement resources needed to stabilize the emergency, and coordinate resource needs through the Local Emergency Operations Center (LEOC).

State Mission-essential Tasks

Missouri State Highway Patrol

1. Activate the MSHP-All Hazard Emergency Preparedness and Response Plan (05-2009)
2. Activate all available personnel and mobilize all viable units.
 - a. Deploy MSHP's Initial Response Force (IRF).
 - b. Deploy Type III Mobile Field Forces (MFF) to designated staging areas in Troops B, C, E, F, G, and I.
 - c. Deploy the Rapid Response Team comprised of Commercial Motor Vehicle Enforcement Troopers.
3. Provide staff for the SEOC and State Area Coordination Centers (SACC) in Troop C and Troop G, if activated, in accordance with the MSHP Plan.
 - a. Designate a Captain from the Field Operations Bureau to serve as Officer in Charge (OIC) over the various response Branches.

REDACTED

4. Implement the MHSP Plan upon verification of seismic event of 6.5 magnitude or greater, or if activated by the SEOC for a lesser earthquake. Once activated, the SEOC will serve as the coordinating point for all state response and recovery activities.
5. Establish contact with law enforcement agencies in affected areas and those threatened by potential aftershocks.
6. Support Missouri's Air Operations Branch with aerial resources (Aircraft Division) in accordance with the *Joint Missouri Air Operations Plan*.
7. Assist local law enforcement in maintaining law and order.
8. Provide traffic and crowd control in coordination with Evacuation Management Team (EMT) and mass care operations.
9. Analyze potential needs within the impact zone and place resources on standby.
10. Provide security and traffic control at the SEOC and all other areas as requested or required.
11. Provide security at critical facilities and around key resources as requested or required.
12. Deploy the Mobile Command and Communications Vehicles (MCCV) to the impacted area.
13. Initiate the MSHP Family Care Plan.
14. Prepare to receive out-of-state officers from the Iowa, Kansas, Nebraska, and Oklahoma, as well as Federal Law Enforcement Officers, at pre-designated staging area.
15. Support search and rescue operations with MFF resources.

Federal Mission-essential Tasks

Federal Emergency Management Agency

1. Activate the RRCC and establish contact with SEOC.
2. Activate support agencies including the U.S. Department of Justice (DOJ), U.S. Department of Homeland Security (DHS), and other ESF-13 partners, as necessary.
3. Ensure a common law enforcement operating picture through coordination with the MSHP at the SEOC.
4. Coordinate with emergency communications to create a sustainable joint law enforcement communication capability with local, state, and federal officials and be prepared to support joint operations.
5. Provide input to the joint public information plan with the State of Missouri for timely and accurate information exchange.
6. Provide resources and equipment at critical facilities in accordance with state priorities.

U.S. Department of Justice

1. Activate the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) and all support agencies including the Federal Bureau of Investigation (FBI), United States Marshals Service (USMS), the Office of Justice Programs (OJP), and the Drug Enforcement Agency (DEA) and provide appropriate law enforcement assets in accordance with state priorities.
2. Activate the ESF #13 National CONOPS Plan.
3. Deploy necessary assets to properly support scaled ESF-13 response operations utilizing all available federal law enforcement agencies.

REDACTED

- a. Designate a Senior Federal Law Enforcement Official (SFLEO).
 - b. Activate ESF #13 Field Support Teams (designated Federal ESF #13 personnel will staff the RRCC, the State EOC and Federal LE Staging Areas).
 - c. Activate ESF #13 Quick Response Teams (designated Federal Law Enforcement Officers [FLEOs] from all Federal LE agencies will mobilize for deployment as needed).
4. Assist the RRCC and SEOC in developing incident management planning efforts.
5. Assist in developing tactical public safety and security plans.
6. Assist state and local law enforcement in maintaining law and order.
7. Analyze potential needs within the impact zone and place resources on standby.
8. Coordinate with ESF-2 to establish sustainable communications capabilities with all local, state, and federal officials.

Bureau of Alcohol, Tobacco, Firearms and Explosives

Deploy necessary assets to support properly scaled ESF-13 response operations.

Drug Enforcement Administration

Access staff and resources available for deployment to the affected areas to assist with law enforcement /security activities as needed.

Federal Bureau of Investigation

Mobilize the Critical Incident Response Group (CIRG) for deployment to affected areas as directed by the SEOC or the Unified Coordination Group (UCG).

Office of Justice Programs

Assess the need and identify resources to support local and state judicial systems.

U.S. Marshals Service

Mobilize the USMS Incident Management Team and Technical Operations Group.

U.S. Department of Agriculture – Forest Service, Law Enforcement and Investigations

Access staff and resources available for deployment to the affected areas to assist with law enforcement activities as needed.

U.S. Department of Commerce – National Oceanic and Atmospheric Administration

Provide weather information and forecasts through the NOAA All Hazards Weather Radio (NWR) system, the NOAA Weather Wire Service, and the Emergency Managers Weather Information Network (EMWIN) of the National Weather Service.

U.S. Department of Defense – U.S. Army Corps of Engineering

Provide assistance and expertise for electronic badging of security and response personnel.

U.S. Department of Homeland Security

1. Assist the SEOC in developing incident management planning efforts.

Office of Infrastructure Protection

Coordinate with the SEOC and private sector officials to protect CI/KR and communications operating systems.

Science and Technology Directorate

Provide scientific and technology subject matter experts in the support of federal, state, and local partners.

Transportation Security Administration

Provide personnel and resources in support of transportation infrastructure protection and security needs.

Office of Law Enforcement/Federal Air Marshals Service

1. Access staff and resources available for deployment to affected areas to assist law enforcement activities as needed.
2. Provide additional security and law enforcement activities at affected airports.

U.S. Customs and Border Patrol

Activate the Border Patrol Tactical Unit (BORTAC) and Border Patrol Search Trauma and Rescue (BOARSTAR) teams.

U.S. Department of the Interior – Bureau of Indian Affairs, Land Management, Reclamation Fish and Wildlife, and National Park Services

Access staff and resources available for deployment to affected areas to assist with law enforcement activities as needed.

3.1.1.2 Phase 2b Deployment

Purpose of Phase

The purpose of this phase is to deploy necessary assets to sustain systematic public safety response operations scaled as closely as possible to the needs of the incident. ESF-13 partners will work to ensure that all assets and resources are properly deployed and that continuity is established to meet the needs of emergency responders and affected population.

End State of Phase

The end state of this phase is a defined and systematic public safety response operation which is characterized by a consistent staffing plan and resource request and processing system. Consistent staffing and resourcing allows efficient and effective public safety support at a defined pace.

Local Mission-essential Tasks

Local Law Enforcement

1. Continue to protect the citizens of each local jurisdiction.
2. Continue to support evacuation and sheltering procedures in coordination with ESF-6.
3. Continue to protect government facilities, government assets, and key infrastructure and assist in securing local jails and facilities.
4. Continue to provide security at hospitals and other key non-government facilities if needed.
5. Furnish incident status reports to state officials.
6. Maintain records of all emergency operations.
7. Continue to provide situation updates to the SEOC.
8. Assess the need for additional assets and request them through the LEOC or SEOC.

9. Coordinate emergency operations with arriving responders

State Mission-essential Tasks

Missouri State Highway Patrol

1. Provide public safety input into the IAP, gathering essential elements of information and developing reports that provide current incident situational overview.
2. Provide situational awareness and deployment requirements of responding officers in coordination with the MIAC.
3. Respond to local requests for assistance.
4. Assist all response agencies as directed by SEOC.
5. Patrol evacuated areas as resources allow.
6. Conduct/support warning operations.
7. Assist with damage assessment and analyze law enforcement requirements.
8. Assist search and rescue operations.
9. Continue to provide security for reception centers, lodging and feeding facilities, and emergency shelters as directed by the SEOC.
10. Manage the Field Operations Bureau

Federal Mission-essential Tasks

Federal Emergency Management Agency

1. Conduct lifesaving operations including assisting with evacuations and S&R operations.
2. Coordinate provision of services, equipment, and supplies to support expedient operations.
3. Continue to provide resources and equipment at critical facilities in accordance with state priorities.
4. Continue to work with local and state agencies to assess law enforcement capabilities, resource needs of jails and prisons, resource needs for the protection and safety of citizens, and resource needs for the protection of CI/KR, utilities and government facilities, and armories and firearms facilities.
5. Continue to provide guidance and ensure controls are in place to protect responders and the public.

U.S. Department of Justice

1. Obtain situational report through SEOC to determine law enforcement needs and assist with coordinating general law enforcement/security activities in the affected area.
2. Coordinate and resolve conflicting demands for law enforcement/security personnel.

Bureau of Alcohol, Tobacco, Firearms and Explosives

1. Deploy necessary assets to coordinate properly scaled ESF-13 response operations needs.
2. Assist local and state law enforcement with identification of all armories and firearms sales facilities in the affected area and the process for securing weapons and ammunition in those facilities.

Drug Enforcement Administration

REDACTED

Appendix C13 – ESF-13 Public Safety

Joint Missouri & Region VII Response Operations Plan

1. As requested, assign available personnel in support of all local and state public safety and law enforcement operations.
2. As requested, assist evacuation of victims and movement of rescue and law enforcement personnel through available rescue resources and aircraft.

Federal Bureau of Investigation

1. As requested, mobilize the Critical Incident Response Group (CIRG) to facilitate rapid response and crisis management.
2. Via the CIRG, integrate tactical and investigative resources and expertise for critical incidents.
3. As requested, provide basic law enforcement assistance at the local and state levels to supplement all public safety efforts.
4. As requested, provide available aircraft for rescue operations and transportation of rescue and law enforcement personnel into and out of the affected area.

Office of Justice Programs

1. Through the Bureau of Justice Assistance and as requested, provide personnel to assist state and local law enforcement agencies for emergency assistance to crime victims.
2. Assist in coordinating assignment of citizen volunteer groups.
3. Provide technical support and services to support continuity of operations of local and state judicial technology systems.

U.S. Marshals Service

1. As requested, mobilize the Special Operations Group for assignment to force protection operations.
2. As requested and in coordination with ESF-2, assign available mobile command units deployed in support of assigned law enforcement missions.
3. As requested, mobilize the Technical Operations Group to deploy specialty vehicles and available equipment for assigned missions.
4. As needed, assign personnel to assist in protection and movement of federal jurists.

U.S. Department of Agriculture – Forest Service, Law Enforcement and Investigations

1. As requested, provide personnel for staging area(s) and equipment and personnel coordination and deployment.
2. Conduct cultural and natural resource damage assessment and security.
3. As requested, assign specialty units for force protection support in back country and rural areas.
4. As requested, provide specialty equipment to support rural law enforcement and rescue and force protection efforts including high-wheel/4-wheel drive vehicles, all-terrain vehicles (ATV), snowmobiles, horse-mounted patrols, and tactical helicopter operations.

U.S. Department of Commerce – National Oceanic and Atmospheric Administration

1. Provide timely weather forecasting in support of all law enforcement and security efforts.
2. Transmit critical post-event information over the NOAA All-Hazards Radio System.

U.S. Department of Defense – U.S. Army Corps of Engineering

1. Coordinate with other military elements in support of all state and local law enforcement efforts.

REDACTED

2. Provide emergency electrical generation equipment and system interface controls to critical law enforcement and security facilities.

U.S. Department of Energy – National Nuclear Security Administration

1. Provide technical advice on all radiological or nuclear issues where exposure to the public, law enforcement, rescue personnel, or the environment may have occurred.
2. Support security efforts at all affected facilities where nuclear or radiological isotopes are used or stored.
3. Provide subject matter experts to facilitate movement or securing of nuclear or radiological isotopes in accordance with Nuclear Regulatory Commission (NRC) and U.S. Environmental Protection Agency (EPA) regulations.

U.S. Department of Homeland Security

As requested, provide assistance to state and local agencies for law enforcement response efforts, security initiatives, and rescue planning and response activities.

Office of Infrastructure Protection

Assist the local, state, private sector officials in conducting risk analysis surveys and vulnerability assessments for coordination of protective measures for CI/KR.

Science and Technology Directorate

As requested, mobilize technological and scientific subject matter experts in support of law enforcement response units.

Transportation Security Administration

1. As requested, provide security as requested for all modes of transportation.
2. Assist law enforcement and security efforts at affected airports.

Office of Law Enforcement / Federal Air Marshals Service

1. As requested, provide staff and resources for deployment to affected areas to assist with law enforcement and security activities as needed.
2. Continue to provide security and law enforcement activities at affected airports.

U.S. Customs and Border Patrol

1. As requested, mobilize available Special Operations staff and K-9 units for detection and recovery of humans and/or cadavers.
2. As requested, provide assistance in all law enforcement and force protection and rescue efforts in back areas and rural areas.
3. As requested, mobilize specialty assets to include horse-mounted patrols, high wheel vehicles and ATVs.
4. As requested, provide fixed wing and rotary wing aviation assets for aerial surveillance, rescue, and law enforcement asset deployment.

U.S. Department of the Interior – Bureau of Indian Affairs, Land Management, Reclamation, Fish and Wildlife, and National Park Services

1. As requested, mobilize uniformed specialty response teams to assist with all law enforcement, security and force protection, and traffic control efforts.

2. As requested, perform remote law enforcement/security and force protection operations in rural areas and in winter conditions.
3. As requested, mobilize specialty assets to include horse-mounted patrols, high-wheel vehicles and, ATVs.

3.1.1.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

The purpose of this phase is to develop sustained public safety response operations through defined operational periods, scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is indicated by sustainable operational periods characterized by defined resource needs and a steady state of public safety support.

Local Mission-essential Tasks

Local Law Enforcement

1. Continue to assess needs and request assets through the LEOC or SEOC as needed.
2. Continue to provide law enforcement and maintain public order.
3. Continue to secure the affected areas of local jurisdiction and maintain order.
4. Continue to assist in the effective evacuation and sheltering of local citizens.

State Mission-essential Tasks

Missouri State Highway Patrol

1. Continue to monitor and assess the situation and support local responders to stabilize the incident.
2. Continue to provide mission support as needed.
3. Continue to protect citizens and property.
4. Continue to provide law enforcement and maintain public safety.
5. Provide reports and information to SEOC as requested utilizing the ICS.
6. Continue operations as necessary until the situation stabilizes.
7. Release mutual aid and private resources when possible.
8. Continue to support other services, especially in the areas of damage assessment and S&R.
9. Provide information for news releases in coordination with emergency public information staff.

Federal Mission-essential Tasks

Federal Emergency Management Agency

1. Continue to provide guidance and ensure controls are in place to protect responders and the public.
2. Continue to assess critical public safety assets and support restoration.
3. Continue to monitor and assess the situation and support local responders.
4. Provide reports and information to senior leadership as requested.

U.S. Department of Justice

REDACTED

Appendix C13 – ESF-13 Public Safety

Joint Missouri & Region VII Response Operations Plan

1. Continue to provide assets (ATF, DEA, FBI, and OJP) as requested for deployment to law enforcement and security operations.
2. Provide continued support to ESF-2 for established and additional communications needs.

Bureau of Alcohol, Tobacco, Firearms and Explosives

1. Continue to deploy necessary assets to support properly scaled ESF-13 response operations.
2. Continue to assist local and state law enforcement with identified armories and firearms sales facilities in the affected area, securing those facilities and monitoring the movement of weapons as necessary.

Drug Enforcement Administration

1. Continue to provide available personnel in support of all local and state public safety and law enforcement operations as requested.
2. Assist in the evacuation of victims and the movement of rescue and law enforcement personnel through the use of rescue aircraft.
3. Provide specialty units for force protection in remote and rural areas.

Federal Bureau of Investigation

1. Continue to support all SEOC requests via the CIRG.
2. Continue with integration of tactical and investigative resources and expertise for all law enforcement and security needs as needed.
3. Continue with basic law enforcement assistance at the local and state level supplementing all public safety efforts.
4. Assist all rescue operations and transportation of law enforcement personnel /rescue personnel via available aircraft resources.

Office of Justice Programs

1. Provide emergency assistance to crime victims.
2. Maintain technical support services to re-establish and ensure operations of local and state judicial technology systems.
3. Continue to assist in the coordination of citizen volunteer groups as needed.

U.S. Marshals Service

1. Continue to provide personnel to facilitate Special Operations Group assignment for force protection operations.
2. Continue to support ESF-2 with assigned mobile communications units.
3. Provide specialty vehicles, equipment, and personnel for assigned law enforcement/security missions.

U.S. Department of Agriculture – Forest Service, Law Enforcement and Investigations

1. Continue to support law enforcement missions utilizing ICS and National Incident Management System (NIMS) typed resources.
2. Assist with continued coordination of staging area equipment/personnel and assignment of assets to the affected area(s) as directed by the UCG.

REDACTED

3. Provide damage assessment reports of cultural and natural resource.
4. Continue to provide specialized personnel for back country and rural area force protection missions.
5. Assess needs and prioritization of specialty equipment to support rural law enforcement, rescue and force protection efforts.

U.S. Department of Commerce – National Oceanic and Atmospheric Administration

1. Continue to provide weather forecasting for each operational period.
2. Continue transmission of all post-event information in support of law enforcement/security efforts over the NOAA All Hazards Radio System.

U.S. Department of Defense – U.S. Army Corps of Engineering

1. Coordinate all other military elements in support of all state and local law enforcement/security operations.
2. Continue to provide emergency electrical generation equipment and system interface controls for critical law enforcement and security.

U.S. Department of Energy – National Nuclear Security Administration

1. Continue with support of security at all affected facilities using or storing nuclear or radiological isotopes.
2. Continue to assist with technical advice on all radiological or nuclear exposure issues to law enforcement, rescue personnel, and the public.
3. Continue to provide subject matter experts for movement or securing of nuclear and radiological isotopes, in accordance with NRC and EPA.

U.S. Department of Homeland Security

Continue to support law enforcement, security and rescue planning and response activities.

Office of Infrastructure Protection

Continue with risk analysis and vulnerability assessments to assist local, state, and private sector officials to coordinate protection of CI/KR.

Science and Technology Directorate

Continue to support all law enforcement response units with technological and scientific subject matter experts as requested.

Transportation Security Administration

1. As requested, continue to provide security assets for all modes of transportation.
2. Assist with all law enforcement and security efforts at affected airports.

Office of Law Enforcement / Federal Air Marshals Service

1. Continue to deploy staff and resources to assist with all law enforcement and security activities.
2. Provide continued security and law enforcement activities at affected airports.

U.S. Customs and Border Patrol

1. Continue to provide assets for detection and recovery of humans and / or cadavers.

REDACTED

2. Continue to support all law enforcement, force protection and rescue efforts in remote or rural areas with available resources.
3. Continue to provide available specialty assets to support law enforcement activities as needed.
4. Continue to support aviation missions with available aviation assets.

U.S. Department of the Interior – Bureau of Indian Affairs, Land Management, Reclamation Fish and Wildlife, and National Park Services

1. Continue to provide specialty response teams to assist with all law enforcement operations as needed.
2. Continue to assist with remote and rural law enforcement /security and force protection operations.
3. Continue to provide available specialty assets to support all law enforcement activities, as required.

4.0 Oversight, Coordination and Communications

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Law Enforcement (police and sheriff's departments)

4.1.2 State

- Missouri State Highway Patrol

4.1.3 Federal

- Department of Justice
 - Bureau of Alcohol, Tobacco, Firearms and Explosives
 - Drug Enforcement Administration
 - Federal Bureau of Investigation
 - Office of Justice Programs
 - U.S. Marshals Service

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Emergency Management Departments
- Local Fire Departments
- Local Emergency Medical Services
- Non-Governmental Organizations
- Community Emergency Response Team

4.2.2 State

- Civil Air Patrol
- Missouri Department of Conservation
- Missouri Department of Corrections
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri Department of Transportation
- Missouri National Guard
- Missouri State Water Patrol
- Missouri Voluntary Organizations Active in Disaster

4.2.3 Federal

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Energy
- U.S. Department of Homeland Security
- U.S. Department of the Interior
- U.S. Department of the Treasury
- U.S. Department of Veterans Affairs
- U.S. Environmental Protection Agency
- National Aeronautics and Space Administration
- Social Security Administration
- U.S. Postal Service
- Inspectors General Offices
- Private Sector

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The EMAC offers state-to-state assistance during a governor-declared state of emergency (receiving state). Assumedly, during a NMSZ incident, EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to utilize the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process. Both the federal and EMAC system are activated and managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

1. The Governor of Missouri declares a disaster.

2. SEMA opens an EMAC event in the EMAC Operations System.
3. Missouri requests assets based on mission assignment.
4. The assisting state communicates available assets and estimated costs to SEMA.
5. SEMA approves the resource and costs.
6. The resource from the assisting state mobilizes and deploys.

For resources not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136. Only the SEMA Director, Deputy Director or Operations Branch Chief may approve an EMAC or ARF request.

5.1 Pre-scripted Requests for EMAC Assistance

Table C13-4 details resources that may be requested through the EMAC system from non-impacted states by pre-incident agreement with Missouri. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

REDACTED

Table C13-4 Response Phase Operational Periods

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	Armored Vehicle	
	ATV Type III 4-Wheel Drive Cargo	
	Patrol Boat	
	Type V Corrections Bus	
	Communications Type II Telephone Cell	
	Crew Transport Type V	
	Fuel Aviation- Jet Fuel	
	Fuel Type II Diesel	
	Law Enforcement Aviation Helicopters Patrol and Surveillance Type I	
	Law Enforcement Aviation Observation Aircraft Fixed Wing Type I	
	Mobile Communications Center Type I	
	Mobile Communications Center Type III	
	Mobile Command Communications Post Type III	
	Mobile Field Force Law Enforcement Crowd Control Team Type I	
	Mobile Field Force Law Enforcement Crowd Control Team Type III	
	Patrol Vehicle 4WD	
	Prisoner Transportation Team	
	ATV Type II 4-Wheel Drive Utility	
	ATV Type IV 6-Wheel Drive Amphibious	
	Bomb Squad-Explosives Teams Type III	
	Communications Type III Radios Handheld	
	Communications Type VI Radios Handheld	
	Crew Transport Type VII	
	Fuel Type I Gasoline	
	Fuel Type III Aviation	
	Law Enforcement Aviation Helicopters Patrol and Surveillance Type II	
	Law Enforcement Aviation Observation Aircraft Fixed Wing Type II	

REDACTED

Appendix C13 – ESF-13 Public Safety

Joint Missouri & Region VII Response Operations Plan

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	Mobile Communications Center Type II	
	Mobile Communications Center Type IV	
	Mobile Command Communications Post Type IV	
	Mobile Field Force Law Enforcement Crowd Control Team Type II	
	Officers-Deputy	

5.2 Pre-scripted Requests for Federal Assistance

Table C10-5 details resources that may be requested through the Federal Government via FEMA Mission Assignments. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C13-5 Pre-scripted Action Request Form

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Commissioner	MDPS				

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE
OPERATIONS PLAN**

**Annex C, Appendix C14
ESF-14 – Long-Term Community Recovery**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

The ESF-14 annex to the New Madrid Seismic Zone Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for joint local, state, and federal long term community recovery operations following a catastrophic earthquake in the southeastern part of Missouri.

Under the State of Missouri Emergency Operations Plan (SEOP) Annex Q, the Missouri State Emergency Management Agency (SEMA) has the primary responsibility for the Emergency Support Function – Long-Term Community Recovery Annex (ESF-14). The SEOP specifies ESF-14 activities as the emergency operations necessary to coordinate disaster relief efforts for rapid return to stabilized conditions and procedures for implementing supplemental Federal disaster assistance available under PL 93-288, the Robert T. Stafford Disaster Relief Act of 1988, as amended by PL 100-707.

Under the National Response Framework (NRF), the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) is designated as Coordinator and Primary Agency for ESF-14. At the federal level, ESF-14 provides a mechanism for coordinating support to state, regional, and local governments, nongovernmental organizations (NGOs), and the private sector, enabling community recovery from the long-term consequences of extraordinary disasters, providing recovery planning and technical assistance support.

The joint state/federal ESF-14 accomplishes this by identifying and facilitating availability and use of funding sources and providing technical assistance (such as impact analyses).

The New-Madrid Seismic Zone will require extensive ESF-14 operations. According to modeling data from the MAE Center, the major impacts of the earthquake expected in the 22 highest impacted Missouri counties are as follows:

- 6.5 million tons of debris created including about 2.9 million tons of brick, wood, and other and about 3.6 million tons of steel and concrete. Within this debris, white goods, hazardous materials, and other debris will require environmental considerations.
- 14,125 people with injuries
- 686 fatalities
- 87,000 buildings damaged; 44,000 buildings completely destroyed including the following critical infrastructure:
 - 7 hospitals
 - 69 fire stations
 - 53 police stations
 - 136 schools
 - 1,004 bridges
 - 28 airports
 - 51 ports
 - 23 railroad facilities
 - 6 dams
 - 25 levees

- 29 hazardous material facilities

1.1 Purpose

The purpose of this annex is to provide ESF-specific information for the OPLAN. The ESF-14, Long Term Community Recovery Annex details the ESF's limitations, organization, and course of action to execute the roles and responsibilities assigned to the ESF during a NMSZ incident. The OPLAN annex identifies gaps and long-term needs, enhancing unity of effort, and links existing plans. Specifically, this Annex provides the ESF-14 Coordinator with the basis for actions necessary to assist individuals, households, government, infrastructure, businesses and community in meeting basic needs and returning to self-sufficiency following a catastrophic earthquake in the southeastern part of Missouri.

The scope of this appendix applies primarily to short-term recovery. As described in the National Response Framework, short-term recovery is immediate and overlaps with response. As applied by this document, ESF-14 will only address those actions taken within the first 120 hours post-earthquake. However, this document also addresses programs and systems that will facilitate the transition to long-term recovery. This annex will not serve as a comprehensive short-term or long-term recovery plan. This document is intended to augment Annex Q and will not supersede its applicability.

1.2. Considerations

- All levels of government are responsible for providing for the health, safety, and welfare of its citizens.
- The extraordinary requirements of the NMSZ earthquake will significantly exceed the capability of most jurisdictions.
- ESF-14 will need to employ all available resources, local, state, federal, private and volunteer in order to meet the need generated by the incident. Early integration of ESF-14 technical authorities into operations is essential.
- While FEMA and SEMA have lead roles in facilitating and optimizing the use of ESF-14 resources, they will be reliant on the support agencies for resources. Participation in a holistic, coordinated recovery effort is critical to achieve the most efficient, effective results.
- Federal agencies providing recovery assistance under independent authorities to state and local governments, the private sector, and individuals, need to coordinate assessments, identification and resolution of issues through ESF-14 to contribute to this joint effort.
- State and local governments and the private sector have the lead role in defining and addressing risk and recovery priorities, and in leading the community recovery planning process.
- Federal ESF-14 agencies will coordinate recovery planning efforts with these stakeholders, inasmuch as is possible. Federal support will be tailored based on the type, extent, and duration of the incident, and on the availability of Federal resources.
- An earthquake in the State may occur at any time with little or no warning. ESF-14 agencies may not be fully equipped to respond to no-notice events; therefore a delay in plan activation is anticipated.
- Members of Missouri Volunteer Organizations Active in Disasters (MOVOAD)—for example, American Red Cross and Salvation Army—and other organizations may provide disaster assistance and are an integral component to ESF-14 activities.

1.3 Assumptions

General

- Most ESF-14 activities will occur within a timeframe which exceeds the scope of this annex, however, limited preliminary assessments, coordination and technical support will occur concurrently with the operational phases of response.
- Traditional recovery efforts may need to be adjusted to account for aftershocks originating from the NMSZ. These secondary events may create additional damage, create rebuilding safety issues, impede construction efforts, and contribute to continued business disruptions for up to six months post-initial earthquake.
- Especially hard-hit communities may need extensive planning, engineering, environmental, and financial technical assistance to succeed during the recovery process.
- Private industry will be involved in a number of ways—as a resource provider, resource consumer, and coordination partner. Established structures at the local, state, and regional levels to coordinate recovery will include active involvement of the private sector.

Local

- Local governments not as severely impacted may consider recovery operations earlier in the incident life cycle. These governments will be forced to balance the need to recover quickly to preserve their social and economic systems with the competing need to develop more resilient communities. Local governments can engage the State ESF-14 Task Force for technical expertise; ensuring opportunities are not lost in the use and management of recovery resources.
- To lessen the burden on recovery efforts, local authorities take immediate steps to warn and evacuate citizens, alleviate suffering, protect life and property, commit available resources, and request assistance from the next higher level of government.
- Local officials of jurisdictions in an identified flood-prone area conform to the rules and regulations of the National Flood Insurance Program (NFIP).
- It is likely local governments will move slower, when initiating recovery activities, than their State or private-sector counterparts as they work with more significant fiscal constraints and will be operating with fewer staff due to the direct affects of the event.

State

- Recovery will begin at different times and proceed at different rates within the State. The severity of impacts and localized effects of the earthquake will vary greatly depending upon soil composition and proximity to the fault. In addition, aftershocks could affect the State inconsistently. As a result, response and recovery will occur simultaneously and governmental mechanisms must be prepared to support this.
- Only 41 percent of Missouri residents maintain earthquake insurance on their homes and businesses. The NMSZ will result in a massive shortfall in insurance repair or replacement financing, significantly impeding repair and reconstruction because owners may choose to abandon their properties.

Federal

- ESF-14 will activate in accordance with the overall response effort. At the occurrence of a 6.5 earthquake, considerations should be made for activation and deployment.

- Resources available under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Stafford Act) will serve as only one part of the federal financial resources package needed for recovery. Numerous other federal agencies, acting under their own authorities, and with supplemental appropriations, will bring other resources but must be integrated into the recovery planning and execution process. A federal coordination mechanism will be required to supplement the State ESF-14 Task Force.

1.4 Limiting Factors

According to scenario modeling, significant aftershocks may continue for as long as six months following the initial earthquake. Historical NMSZ events show the potential for hundreds of aftershocks of various magnitudes. This reoccurring and prolonged incident may further complicate response and recovery efforts by diminishing any clear distinction between response and recovery phases. Because of the drastic nature of this incident and its widespread impact, there are several limiting factors that must be considered. These factors include:

- Response and immediate short-term recovery activities are generally not considered LTCR actions.
- Level of assistance depends on the existing capacity, capabilities and needs of the state and community, as well as other available resources.
- Damage assessments / impact information needed for the program assessments require time to produce. Program relies on the assessments to determine the levels and types of LTCR assistance.
- Limited ESF-14 LTCR staff available to deploy.
- Ensuring that LTCR is present and role understood – that short-term recovery decisions impact on LTCR planning process. Short-term decisions prepare the way for better long-term planning.

2.0 Mission

The mission of the joint state/federal recovery function is to institute a federal, state and local effort that enables disaster-impacted communities to identify opportunities to help create partnerships and optimize resources.

3.0 Execution

Region VII response phase methodology has been designed to meet the first five days (120 hours) of operations. The current methodology is:

Table C14-1 Response Phase Operational Periods

Response Phase	Operational Period
2a – Activation/Immediate Response	E + 24hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Sustained Response	E + 72 – E + 120 hrs +

The Response Phase and Operational Periods are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

- Overall coordination of recovery resources and partners. Initiate the coordination and rapid activation of ESF-14 program support agencies. Provide interagency coordination and technical assistance to support state and community long-term recovery efforts.
- Identify the need for a common operating picture among support agencies, identify gaps and needs, coordinate the formulation of recovery strategies and provide technical assistance to the community.
- Coordination framework and groundwork for when response transitions into recovery post 120 hours and LTCR resources are deployed.
- Determine the organization structure.
- Establish the framework of coordination for ESF-14 resources.
- Gain understanding of response decisions impact on LTCR planning process.
- Provide LTCR planning perspective for recovery decisions.
- Provide awareness of LTCR and its role as decisions are being made.

3.1.1 Phased Response Concepts

3.1.1.1 Phase 2a: Alert/Notification

Purpose of Phase

- Assemble information to support initial program assessments, advisory and organizational functions.
- Identify and deploy LTCR program lead; connect with National Working Group (NWG).
- Determine and notify federal support agencies.
- Establish ESF-14 presence at the JFO.
- Initiate coordination with FCO, Section leads, and SCO (state point of contact) for awareness of and role of ESF-14 program.
- Assemble information to support initial program assessments, advisory and organizational functions.
- Identify the organizational structure to support LTCR efforts after first 120 hours.

End State of Phase

- ESF-14 program lead deployed.
- National Working Group engaged and federal support agencies identified and notified.
- ESF-14 presence at JFO and coordination initiated with FCO, SCO and Section leads.
- Organizational structure outlined/drafted.

Local Mission Essential Tasks

Local Emergency Management Director

1. Conduct and collect initial damage assessments and impacts (locally)

2. Request assistance from the State, as needed

State Mission Essential Tasks

State Emergency Management Agency

1. Focus on response and activities directly associated with life safety
2. Conduct and collect initial damage assessments and impacts (local, regional and statewide)
3. Organize state framework/task force to address the long-term recovery issues at all levels, including, but not limited to, the following stakeholders:
 - a. Missouri Housing Development Commission
 - b. FEMA/ESF-14
 - c. MO Department of Social Services
 - d. MO Department of Health & Senior Services
 - e. SEMA
 - f. MO Department of Insurance
 - g. MO Department of Economic Development
 - h. MO Department of Natural Resources
 - i. Small Business Administration
 - j. U.S. Army Corps of Engineers
 - k. MOP3
 - l. Missouri Department of Conservation
4. Identify state ESF-14 point of contact for each supporting agency
5. Appoint a designated recovery point of contact to represent the State

Federal Mission Essential Tasks

Federal Emergency Management Agency

1. Program Lead arrives at JFO to coordinate logistics requirements.
2. Program lead to establish initial coordination and communication structure FCO/SCO/ state and discussions for LTCR role and scope.
3. Make FCO/SCO/Section Leads/State aware of program and their respective roles in supporting LTCR efforts to provide long-term community recovery assistance.
4. Coordinate with state ESF-14 point of contact.
5. Discuss and define the prospective scope of LTCR assistance.
6. Establish framework for managing initial ESF-14 resource deployment.
7. Draft framework/process for collection of damage and impact assessments from various entities and prep for program Preliminary Assessments.
8. Identify and initiate Advance Team and Incident Support team staffing needs.

3.1.1.2 Phase 2b: Deployment

Purpose of Phase

- Establish coordination support activities – State recovery structure.
- Implement process for data collection (federal, state, and local) to support damage assessments.

- Determine potential LTRC communities, sector impacts, and technical assistance needs.
- Conduct Preliminary Assessments; Community Assessments
- Determine level and types of ESF-14 LTRC technical assistance required.
- Discuss state and local roles/expectations.

End State of Phase

- Advance Team and Incident Report team staff deployed and at the JFO.
- Damage assessments and LTR Assessment completed – initial LTRC communities identified and technical assistance needs identified.
- Draft Management Strategy outlined.
- Draft State Recovery structure.
- Discuss state and local roles/expectations

Local Mission Essential Tasks

Local Emergency Management Director

1. Response related activities (ongoing).
2. Conduct and collect damage assessments and impacts (locally) – identify early needs.
3. State introduction LTRC support available – expectations of local support needed for LTRC program technical assistance.
4. Engage Nongovernmental Organization and Community-Based Organizations to provide support to individuals and families who are displaced by the disaster

State Government

State Emergency Management Agency

1. Response related activities (ongoing).
2. Assist with needs assessments and identification of areas where there is a short fall in available resources
3. State recovery framework – identifying state level resources and assistance available.
4. Formally engage state agencies in recovery activities, including the six long term recovery functions:
 - a. Community Planning and Capacity Building
 - b. Economic Development
 - c. Health, Social and Community Services
 - d. Housing
 - e. Infrastructure Systems
 - f. Natural and Cultural Resources
 - g. Individual and Household Recovery

5. Coordinate initial contact with identified LTCR communities, to include the Small Business Administration and other business associations and other private sector partners through the Missouri Public, Private Partnership.
6. Engage Nongovernmental Organization and Community-Based Organizations to provide support to individuals and families who are displaced by the disaster, to include Missouri Voluntary Organizations Active in disaster.
7. Identify ESF-14 point of contact and structure for support and coordination for field activities.

Federal Government

Federal Emergency Management Agency

1. Evaluate data, conduct LTCR Assessments.
2. Prepare recommendations - draft management strategy outlined.
3. Engaging federal partners for interagency coordination
4. Assist State and community with identifying needs.
5. Identifying federal resources and assistance available.

3.1.1.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

- Outline Management Strategy.
- Program framework in place to handle the program ramp up of recovery mode (full staffing of ESF-14).
- Develop draft community LTCR technical assistance and community engagement strategy

End State of Phase

- LTCR staff deployed and in the field.
- LTCR process underway with State direction and guidance.

Local Mission Essential Tasks

Local Emergency Management Director

1. Collect damage assessments and impacts (locally) – identify potential long-term needs.
2. Working closely with LTCR technical assistance team to implement process.
3. Providing leadership, guidance and involvement for the process.
4. Conducting community outreach/support for the process.
5. Provide information and resources as needed to support the LTCR efforts (plans, numbers, meeting space, etc.).
6. Discuss recovery needs/decisions as they relate to long-term recovery.
7. State introduction LTCR support available – expectations of local support needed for LTCR program technical assistance.

State Mission Essential Tasks

State Emergency Management Agency

1. Guidance and priority for LTCR activities in field.
2. Coordination with local entities.
3. Identify needs/gaps.
4. Implement state recovery framework.
5. Identifying state level resources and assistance available.
6. Engaging state agencies.
7. Support of transition of program operations – their role in supporting long-term community recovery.
8. Providing the long-term perspective to short-term decisions at the state level – setting the tone.
9. Recognition that communities need to organize and manage the recovery process.

Federal Mission Essential Tasks

Federal Emergency Management Agency

1. LTCR staff deployed in field.
2. Interagency coordination.
3. Identifying needs.
4. Identifying federal resources and assistance available.
5. Engaging federal agencies/partners.

4.0 Oversight, Coordination and Communications

The local, state and federal governments have various authorities to implement assistance programs for the recovery of individuals, households, businesses, governments, and nongovernmental organizations. Additionally, the joint state/federal organization implements recovery planning to effectively integrate recovery programs and to support local, regional, and private-sector recovery efforts.

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Emergency Management Official

4.1.2 State

- State Emergency Management Agency

4.1.3 Federal

- Federal Emergency Management Agency
- Department of Agriculture
- Department of Homeland Security

- Department of Housing and Urban Development
- Small Business Administration

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Individuals and Families
- Businesses
- Nongovernmental Organizations and Community-Based Organizations

4.2.2 State

- Missouri Department of Agriculture
- Missouri Department of Economic Development
- Missouri Department of Health and Senior Services
- Missouri Department of Higher Education
- Missouri Department of Insurance: advocacy
- Missouri Department of Labor and Industrial Relations
- Missouri Department of Mental Health:
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri Division of Fire Safety: coordination of statewide fire mutual aid system
- Missouri National Guard
- Missouri Department of Revenue
- Missouri Department of Transportation
- Missouri Office of the Governor
- Missouri Funeral Directors Association
- MOVOAD
- Salvation Army
- Civil Air Patrol

4.2.3 Federal

- Department of Commerce
- Department of Defense
- Department of Energy
- Department of Health and Human Services
- Department of the Interior

- Department of Labor
- Department of Transportation
- Department of the Treasury
- Environmental Protection Agency
- Corporation for National and Community Service
- Delta Regional Authority
- American Red Cross
- National Voluntary Organizations Active in Disaster

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The Emergency Management Assistance Compact (EMAC) offers state-to-state assistance during governor-declared state of emergency (receiving state). During a NMSZ incident, it is assumed that EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

- The Governor of Missouri will declare a disaster
- SEMA will open an EMAC event in the EMAC Operations System
- Missouri will request assets based on mission assignment
- The assisting state will detail the available assets and estimated costs back to SEMA
- SEMA will approve the resource and cost
- The resource from the assisting state will mobilize and deploy.

For resources that are not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

The table below details potential resources which may be requested through the EMAC system from non impacted states by pre-incident agreement to Missouri. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C14-2 Pre-scripted EMAC Request

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact

5.2 Pre-scripted Requests for Federal Assistance

The table below details potential resources which may be requested through the EMAC system from non impacted State ESF's by pre-incident agreement to Missouri as well as federal resources available through the ARF to requests Federal resources through a FEMA Mission Assignment. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C14-3 Pre-scripted Action Request Form

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C15
ESF-15 – External Affairs**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

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1.0 Situation

This appendix to Annex C to the New Madrid Seismic Zone (NMSZ) Earthquake– Joint State of Missouri & Region VII Response Operations Plan (OPLAN) defines the concept of operations for Emergency Support Function (ESF)-15 – External Affairs, following a catastrophic MNSZ earthquake. The effort involves a coordinated joint state and federal response. Maintaining communication with the affected public is essential to an effective response. ESF-15 ensures that during an incident, coordinated, accurate, and timely information is provided to governments, the private sector, news media, residents, and visitors to the State. This information includes important warnings and instructions for protecting lives and property. The Missouri Office of the Governor and Missouri Department of Public Safety (MDPS) are identified as the principal response organizations for the State of Missouri, and the Federal Emergency Management Agency (FEMA) will be lead federal agency.

1.1 Purpose

This ESF-15 appendix details the ESF’s limitations, organization, and course of action to execute the roles and responsibilities assigned to the ESF during a NMSZ incident. This appendix identifies gaps, and aids the overall aim of Annex C and other annexes to enhance unity of effort and link existing plans. Specifically, this appendix provides the ESF-15 Coordinator with the basis for evaluating and accepting or redirecting mission assignments and tasks received from other ESFs in response to an earthquake event in the NMSZ. ESF-15 is primarily responsible for dissemination of emergency public information and warning. This appendix is devised to support the following Objective as defined by the Region VII Senior Leadership Steering Committee (SLSC) and the ESF-15 Integrated Working Group (IWG):

Objective: Disseminate emergency public information and warning.

To accomplish this, Annex F details the integration of state and federal resources, success of which involves:

- Defining the joint state/federal ESF-15 organization and operational structure
- Describing procedures to disseminate information
- Defining responsibilities following a catastrophic earthquake.

ESF-15 has the plan, resources, methods, and coordination in place to disseminate emergency public information and warning to the primary impacted areas, contiguous areas, and throughout the State of Missouri. ESF-15 will also respond to local, state, regional, national, and international media regarding political, governmental, and individual inquiries about situational awareness, information sharing, and information gathering.

1.2 Considerations

The following considerations are specific to ESF-15. General considerations are included in Section 1.5 of the Base Plan.

- The media’s ability to disseminate public information within the affected area will be greatly reduced by broadcast station inoperability, loss of traditional delivery methods, loss of power, and reduced staff. Public affairs personnel will have to rely heavily on available means and non-

traditional delivery methods. Additionally, national and international media interest will be extreme.

- FEMA maintains expertise and resources to manage the Public Affairs, Congressional Affairs, Intergovernmental Affairs (state, tribal, and local coordination), community relations, and the private sector. Much of this work can be conducted outside the impacted area.
- SEMA has pre-deployed, pre-scripted survival information packets and materials distributed to local communities and emergency managers.

1.3 Assumptions

The following assumptions are specific to ESF-15. General assumptions are included in Section 1.6 of the Base Plan.

- The most severe damage in Region VII will occur in the 21st and 74th largest U.S. media markets (St. Louis/Cape Girardeau). Local, state, regional, national, and international media interest will be intense and sustained. Requests for information from media outlets, congressional offices, and other stakeholders will occur within minutes of the event and quickly overwhelm local public information resources.
- Local public information officers (PIO) may be personally affected by the disaster and not able to report for duty. Access to the affected area by outside PIOs will be extremely limited in the first 48 hours due to infrastructure and transportation damage and safety considerations.
- The media's (radio, television, newspaper, and Internet) ability to disseminate public information will be greatly reduced by station inoperability, loss of power, loss of broadcast towers, and reduced staff. Public affairs personnel will have to rely heavily on available means and non-traditional delivery methods.
- Affected individuals will begin to congregate in ad-hoc locations or designated shelters in the hours following the initial earthquake. If individuals do not have available/operational ways of receiving information, they will seek out methods to receive information disseminated through normal methods.
- Rumors and misinformation will begin to spread almost immediately following the earthquake, both through word-of-mouth and through the Internet. Timely and effective rumor control, most notably through social media, will be crucial in restoring, instilling, and maintaining public confidence.
- Missouri has nine representatives in the U.S. House of Representatives. The two senators from the State have offices in Cape Girardeau and in St. Louis. Members of the U.S. Congress and the Missouri State Legislature will want briefings as soon as possible from senior federal and state officials and will immediately begin planning to visit the affected areas. The demand for accurate, thorough, and timely updates will be significant:
 - State and federal officials (including those affected by the disaster) will be briefed as soon as possible by the Unified Coordination Group (UCG) through ESF-15.
 - Local incident commanders (IC) and government officials may hold their own individual press conferences.
 - The FEMA Office of Legislative Affairs will be overwhelmed by requests for information from congressional offices in Washington; updates to Congress will be conducted through consistent communication with personnel in the field.

- Missouri officials will respond to similar requests through the Governor’s PIO at the state level.
- Trained Community Relations, inter-governmental specialists, and the state/federal Joint Information Center (JIC) Field Officers will be critical to ensuring accurate and timely information is distributed to the local government PIOs, public, media and other information sources (i.e., 211, etc.) throughout the event, thus minimizing the amount of misinformation that reaches the general population.
- Residents and visitors to Missouri will be provided with clear, concise, and continual information, coordinated and consistent across all levels of government; announcements will include information regarding shelters, medical facilities, areas of hazardous materials (HAZMAT), reunification programs (i.e., the National Child Locator Center [NECLC], the National Center for Missing and Exploited Children [NCMEC], American Red Cross [ARC] Safe and Well), and response operations, Points of Distribution (POD), etc.
- Disseminating information to the functional needs population will require additional services for persons with limited or non-English speaking proficiencies, sign language interpreters, and closed captioned message broadcasting. Contracting will be handled by Federal Emergency Management Agency (FEMA) Headquarters’ (HQ) multilingual operations and use resources within Missouri’s higher education system.
- Media outlets across Missouri will request press conferences as soon as possible with available local, state, and federal officials to meet information needs of state and federal authorities.
- Power outages and the widespread destruction of homes, business, utilities, and other infrastructure will severely limit reception of emergency transmissions.
- Cellular communications and text messaging capabilities are expected to be severely degraded or non-existent.
- The Emergency Alert System (EAS), which is designed to deliver emergency messages via broadcast stations direct from local, state, or federal authorities, will be rendered only partially operable due to damaged towers and facilities. The system will remain viable in the unaffected areas of the State.
- Both inter and intra-state broadcasting capabilities will be significantly damaged; broadcasting may be possible with support from the Radio Amateur Civil Emergency Service (RACES) or Amateur Radio Emergency Services (ARES) providing that communication links have been established between emergency operation centers and critical infrastructure.
- Journalists and media personnel within the affected area will also be personally affected by the event and may not be able to perform emergency communications functions.
- Public expectation of government officials is to provide specific information about safety, survival, and protection of property.
- Missouri considers the news media an extension of the disaster response effort. The Governor’s Office recognizes the media’s right and responsibility to provide accurate information to the public during any disaster.

1.4 Limiting Factors

- Dissemination of public emergency information will be hampered by damaged communication infrastructure.

- Public information in the initial stages will be limited and will come from pre-scripted, pre-distributed messages.
- Access by PIOs to the affected area will be extremely limited during the first 48 hours following the disaster.
- Every attempt to get external affairs personnel into the affected area (when this is safe) will be made, though expectation for this is limited.
- Eventually, External Affairs Officials will be at Public Information Critical Venues (PICV)—shelters, PODs, staging areas, etc.

2.0 Mission

The joint state/federal ESF-15 supports External Affairs in incident management and supports ESFs for all local, state, and federal departments and agencies across all functional areas of incident management in efforts to coordinate and disseminate external information. ESF-15 will provide the necessary coordination to prepare and deliver public safety information, and will respond to the media, elected officials, and other key stakeholders, in order to reduce loss of life, prevent human suffering, and reduce property loss following a catastrophic NMSZ earthquake.

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases. Table C15-1 lists the three (sub)phases of Phase 2

Table C15-1 Response Phase Operational Periods

Response Phase	Operational Period
2a – Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Employment/Sustained Response	E + 72 – E + 120 hrs +

The Response Phase and Operational Periods are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.1 Concept of Operations

A 6.5 magnitude or greater earthquake along the NMSZ affecting Missouri will render most conventional public messaging methods ineffective or significantly degraded. This will require use of various methods to convey public safety messages, evacuation instructions, sheltering information, etc. No method should be ruled out, particularly during the first 120 hours.

The incident will generate extensive, sustained national media attention that will overwhelm local and state ESF-15 efforts. Federal ESF-15 components will be deployed immediately to supplement and support state and local emergency public information efforts. The federal ESF-15 will be activated to its full capacity and include all its components as outlined in the federal ESF-15 Standard Operating Procedures (SOP), January 2009, document.

REDACTED

It will be essential to establish and staff a JIC immediately following the incident. The JIC will provide incident-related, life saving and life sustaining information through the media and other sources to individuals, families, businesses, and industries affected directly or indirectly by the incident.

All large-scale evacuations will be overseen by the Evacuation Management Team (EMT) from the SEOC. The EMT is a multidisciplinary team which can support the evacuation efforts, make recommendations to the Unified Command (UC), and coordinate with local jurisdictions. The composition of the EMT is listed in Table C15-2. The EMT will be actively engaged in assessing the impact to jurisdictions and developing a course of action for conducting evacuation operations.

Table C15-2 Evacuation Management Team Composition

Agency Represented	ESF-#
Missouri Department of Public Safety (MDPS)	ESF-13
Public Information Officer (PIO)	ESF-15
State Emergency Management Agency (SEMA)	ESF-5
Missouri Department of Natural Resources (MDNR)	ESF-10
Missouri Department of Transportation (MoDOT)	ESF-1
Voluntary Organizations Active in Disaster (VOAD)	ESF-6
Missouri Department of Social Services (MDSS)	ESF-6
Missouri Department of Health and Senior Services (MDHSS)	ESF-8
Missouri State Highway Patrol (MSHP)	ESF-13
Missouri National Guard (MONG)	N/A
Missouri Department of Mental Health (MDMH)	ESF-6

Localized evacuation will be the responsibility of the local jurisdiction. Once a regional evacuation has been implemented by the EMT, the overall concept of operations is outlined in the ESF-6 appendix to Annex C of this OPLAN. Throughout this process, the Emergency Management Team (EMT) and the local Emergency Management Directors (EMD) will coordinate efficient deployment of resources and utilization of available evacuee shelter capacity, and effectively address modifications to evacuation routes.

3.1.1 Phased Response Concepts

3.1.1.1 Phase 2a: Immediate Response

Purpose of Phase

To establish a comprehensive, functional, integrated agency/jurisdiction regional JIC/JIS within hours of the event. Gain situational awareness and begin dissemination of emergency public information.

End State of Phase

A rapid/immediate response has occurred with a process for effective distribution of emergency public information and a comprehensive response to official government and media inquiries.

Local Mission-essential Tasks

1. Local authorities deliver warnings, notices, and messages to the indigenous population.

REDACTED

2. Distribute pre-packaged material and information.
3. Coordinate with local affected areas and state and federal authorities for situational awareness and a “common message.”
4. The chief elected official, chief executive officer, or other designee will act as the official spokesperson.

State Mission-essential Tasks

Missouri Division of Public Safety

1. Act with priority to deliver life safety information and messages, with initial messages through local, state, and national operational mass media resources including: radio, tv, internet, mass area notification (reverse 911), 211, amateur radio operators, and door to door as needed.
2. State Emergency Operation Center (SEOC) activated with External Affairs component. In the event of a 6.5 magnitude or greater earthquake impacting Missouri, all state departments/agencies will automatically deploy Communication Directors/PIOs or duly appointed alternates to the SEOC, Joint Information Service (JIS)/JIC at the State Emergency Management Agency (SEMA).
3. The MDPS PIO will contact state-level PIOs before the JIC is officially activated to coordinate a response and provide situational awareness.
4. Establish contact with PIOs or designated contacts in the impacted areas.
5. Establish and maintain the JIC/JIS and media center.
6. Establish contact with legislators representing affected areas to provide information on the incident.
7. Evaluate functional/non-functional systems.
8. Test distribution methods—traditional and non-traditional.
9. Initiate assessment of viability of local media in impacted areas.
10. The JIC Coordinator will establish work assignments and schedules.
11. The Governor’s Office shall provide policy guidance for dissemination of all emergency public information and shall designate the official State Spokesperson to brief the news media.
12. Use field reports and local observations for media release information.
13. Apply and use the Emergency Alert System (EAS) for dissemination of critical information.
14. The MDPS PIO will coordinate with the Governor’s Office on the initial release of all Emergency Public Information (EPI).
15. Coordinate with private sector partners (211, Americorp, etc.) and viable media partners.
16. The MDPS Director of Communications will serve as the JIC Coordinator.
17. Numbers and qualifications levels of ESF-15 resources will be determined by the JIC Coordinator and established by ESF-15 partners.

Missouri Department of Agriculture

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri Attorney General’s Office

REDACTED

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri Department of Social Services

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri Department of Health and Senior Services

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri Department of Transportation

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri Department of Labor and Industrial Relations

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri Department of Mental Health

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri Department of Natural Resources

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri Department of Economic Development

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri National Guard

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri Division of Fire Safety

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Missouri State Highway Patrol and Water Patrol

Provide coordinated response and maintain a presence within the SEOC ESF-15 desk.

Federal Mission-essential Tasks

Federal Emergency Management Agency:

1. Upon notification of the occurrence of a NMSZ incident meeting Region VII activation thresholds (refer to Section 3.2.1 of the Base Plan), the Region VII External Affairs Officer will be alerted using the Emergency Notification System initiated by U.S. Department of Defense (DOD) Regional Response Coordination Center (RRCC) leadership.
2. FEMA will self activate and respond with an Incident Management Assessment Team (IMAT) including a PIO to the JFO.
3. Subsequent notifications are the responsibility of ESF-15 leadership.
4. The External Affairs Officer will report to the RRCC and establish a virtual JIC.
5. Numbers and qualifications levels of ESF-15 resources will be determined by the staffing levels set by FEMA Region VII and the anticipated need identified by the External Affairs Officer.
6. Automatic activation, response, and deployment to the SEOC will occur.

3.1.1.2 Phase 2b: Deployment

Purpose of Phase

The purpose of this phase is to create a comprehensive, functional, integrated agency/jurisdiction JIS/JIC, effectively disseminating emergency public information and warning, and providing information to public, media, and official authorities.

End State of Phase

ESF-15 publicizes, through the media, response activities that directly impact or benefit affected communities. Publicized activities may include: locations of shelters and feeding stations, locations of comfort stations, boil water orders, road closure information, school and office closing information, and environmental hazards.

Local Mission-essential Tasks

1. Assess the need for additional assets and request them from the JIC or JIS.
2. Calculate and convey all information dissemination and resource shortfalls.
3. Continue to provide situation updates, assessments, and information dissemination.

State Mission-essential Tasks

1. Establish effective internal/external communications by use of:
 - a. Cell phones
 - b. Satellite communication capabilities
 - c. Activation of a “remote” JIS
 - d. Email, fax, web site, internet, twitter, and media (electronic and printed, wire service, Emergency Broadcast System, 211, etc.)
2. Obtain situational awareness reports from local and state field resources.
3. Evaluate the need for additional activation of the Emergency Management Assistance Compacts (EMAC) (see attached list of request documents in Section 5.0).
4. Evaluate the need for additional submission of Request for Assistance (REC A) forms for FEMA Mission Assignments (see attached list of request documents in Section 5.0).
5. Provide life safety emergency public information (pre-scripted and spontaneous) to general population.
6. Coordination with all response organization PIOs (including public, private, local, state, and federal) for information continuity.
7. Coordinate and affiliate with all external media.
8. Coordinate special requirements and consideration for sense-impaired groups and individuals (functional needs disabilities), and persons with limited or Non-English speaking proficiencies, etc.
9. Support and ensure coordination of information activities to ensure consistency and accuracy of information released to the general public through the State JIC.
10. Oversee media relations—to include media monitoring
11. Support government leaders, all response organizations, and external media providing:

- a. Press Releases, Talking Points, Quick Facts, etc.
 - b. Government Advisories
 - c. Government Briefing Materials
 - d. Notifications to support agencies to staff ESF-15 during an incident
 - e. Responses to state legislative and congressional inquiries
12. Establish priorities for external communications.
 13. Conduct media monitoring.
 14. Ensure continued support of MDPS and the Governor’s Office.
 15. Coordinate and support all state departments’ external affairs offices.

Federal Mission-essential Tasks

1. Deploy Mobile Emergency Response System (MERS), most likely from Denver, Colorado.
2. Request a national satellite truck (contractor) to support the JFO.
3. Provide assistance with media monitoring; initiate and utilize pre-established protocols and coordination with IMAT.
4. Deploy IMAT within first 12 hours; FEMA IMAT response will be to the State first, then to Branches and/or Divisions.
5. Coordinate with FEMA HQ and the National JIS/JIC.
6. Provide technical assistance support and realize that message delivery/staffing will be needed at designated operational locations, including: JFO or Base Camps and Staging Areas and/or PODs, etc.
7. Facilitate mutual coordination with all federal and other state PIOs and ESF-15 partners at the JIC or JIS.
8. Facilitate FEMA support from other regions and with National.
9. Respond to areas where the media have located—local, national, and international.
10. PIOs will be located at key evacuation points, commodity sites, staging areas, and wherever people, reporters, and dignitaries are congregated.

3.1.1.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

To establish a comprehensive, functional, integrated agency/jurisdiction integrated regional JIC/JIS, and plan for transition into long-term response and recovery by:

- Filling in the gaps with permanent, full-time employees
- Rotating out with support from regional and local sources
- Developing relationships with PIOs from other state agencies
- Coordinating with other state and federal departments
- Creating a data base of available PIOs from public/private resources

- Reestablishing or creating local public communication resources (print, audio, video, etc.) for information sharing and dissemination.

End State of Phase

Local, state, and federal communication assets have been deployed, including equipment and personnel to support ESF-15. SEMA is the lead agency to activate the EMAC system for interstate resources such as personnel, equipment, and specialized teams in support of ESF-15. In addition, Missouri may need federal resources, which are coordinated between SEMA and FEMA via mission assignment requests to activate federal ESF resources and maintain the prime objective of “disseminating emergency public information and warning.”

Local Mission-essential Tasks

Continue assessments, acquisition, dissemination, and local coordination of local emergency public information as capable.

State Mission-essential Tasks

Missouri Department of Public Safety

1. Coordinate with embedded field offices.
2. Coordinate with all state, federal, and responding groups and organizations.
3. Continue to verify, analyze, and develop reports that provide a current operating picture of the incident.
4. Continue to organize and coordinate the “same message” philosophy among organizations.
5. Provide escort and itinerary support for legislative, congressional, and other dignitary visits.
6. Evaluate and assess the need for additional EMAC personnel, equipment, specialized teams, and systems in support of ESF-15.
7. Request and monitor the activated ESF-15 federal resources coordinated between SEMA and FEMA that have been requested as mission assignments.
8. Provide additional public affairs support, as needed.
9. Approve and schedule state-level press conferences involving state officials.

Federal Mission-essential Tasks

Federal Emergency Management Agency

1. Deploy federal communication assets for ESF-15 including equipment and personnel.
2. Monitor the status of active mission assignments; continue to accept mission assignments based on capacity.
3. Utilize broadcast production cameras, still cameras, laptops, and software as part of a “push package” provided to FEMA Region VII by FEMA HQ EA for social networking and public information.
4. Supplement broadcast operations teams by FEMA HQs EA to begin capturing images post-incident for state and FEMA use.
5. Utilize Community Relations Teams to print and distribute large quantities of tele-registration flyers in the affected area.

6. Supplement existing state and local communications resources to provide life saving emergency public information and critical information to the public.
7. Support Missouri in providing critical information to the public.
8. Implement the federal ESF-15 mission as outlined in the ESF-15 SOP.
9. ESF-15 representative(s) will attend all meetings and briefings and act as the chief spokespersons along with Governor's Press Secretary or designee.
10. Manage the operation to monitor all local and national news, compile clips, and identify misinformation.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agency (Primary)

4.1.1 Local

- Local Incident Command

4.1.2 State

- Governor's Office Media Relations/Missouri Department of Public Safety
- Missouri Department of Public Safety, Communication Director's Office
- Missouri State Emergency Management Agency

4.1.3 Federal

- Department of Homeland Security/FEMA

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Government
- Local Public Safety
- Local Emergency Management

4.2.2 State

- Missouri Department of Agriculture
- Missouri Attorney General's Office
- Missouri Department of Social Services
- Missouri Department of Transportation
- Missouri Department of Labor and Industrial Relations
- Missouri Department of Mental Health

- Missouri Department of Natural Resources
- Missouri Department of Economic Development
- Missouri National Guard
- Missouri Division of Fire Safety
- Missouri State Highway Patrol

4.2.3 Federal

- All responding federal agencies

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The EMAC offers state-to-state assistance during a governor-declared state of emergency (receiving state). Assumedly, EMAC will be readily available during a NMSZ incident, and can be used to obtain needed resources quickly. The State of Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA’s mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

1. The Governor of Missouri declares a disaster.
2. SEMA opens an EMAC event in the EMAC Operations System.
3. Missouri requests assets based on mission assignment.
4. The assisting state details available assets and estimates costs, communicating this information to SEMA.
5. SEMA approves the resource and cost.
6. The resource from the assisting state mobilizes and deploys.

For resources not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance

Table C15-3 lists resources that may be requested for utilization in Missouri from non-impacted states through the EMAC system by pre-incident agreement. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

Table C15-3 Pre-scripted EMAC Requests

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	State ESF Public Information Officers	

5.2 Pre-scripted Requests for Federal Assistance

Table C15-4 lists resources that may be requested through the Federal Government via FEMA Mission Assignments. Most resource requests (ARF) are pre-developed to allow for rapid processing during a NMSZ incident.

Table C15-4 Pre-scripted Action Request Forms

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Administrator	SEMA		External Affairs Teams		
	Administrator	SEMA		State Community Relations Teams		
	Administrator			Local Community Relations Teams		

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex C, Appendix C16
Military Support**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

The Military Support appendix to Annex C of to the New Madrid Seismic Zone (NMSZ) Earthquake – Joint State of Missouri & Region VII Response Operations Plan (OPLAN) describes the concept of operations for providing military support of joint local, state, and federal emergency management operations following a catastrophic earthquake in the southeastern part of Missouri.

The scenario for this incident was developed by The Mid-America Earthquake (MAE) Center. Supplemental loss estimation data were based on the Federal Emergency Management Agency's (FEMA) December 2005 Hazards U.S. Multi-Hazards (HAZUS-MH) Earthquake Event Report, Southeast Missouri. The impacted counties highlighted in this plan are specified on the basis of a cumulative review of direct damage and loss of functional capabilities associated with infrastructure, social impacts, and direct economic losses according to the models used to generate the NMSZ scenario. Damage, losses of operational capabilities, and direct economic losses would not be confined to these counties—all counties in Missouri would be impacted by a New Madrid incident, though the impacts would be less severe outside the designated impacted counties. As a no-notice incident, this Military Support appendix is a flexible document that provides initial (incident to 120 hours+) organization and automatic response functions while allowing stakeholders at all levels to gather situational awareness and muster necessary resources to save and sustain lives, protect property, and promote economic and social recovery.

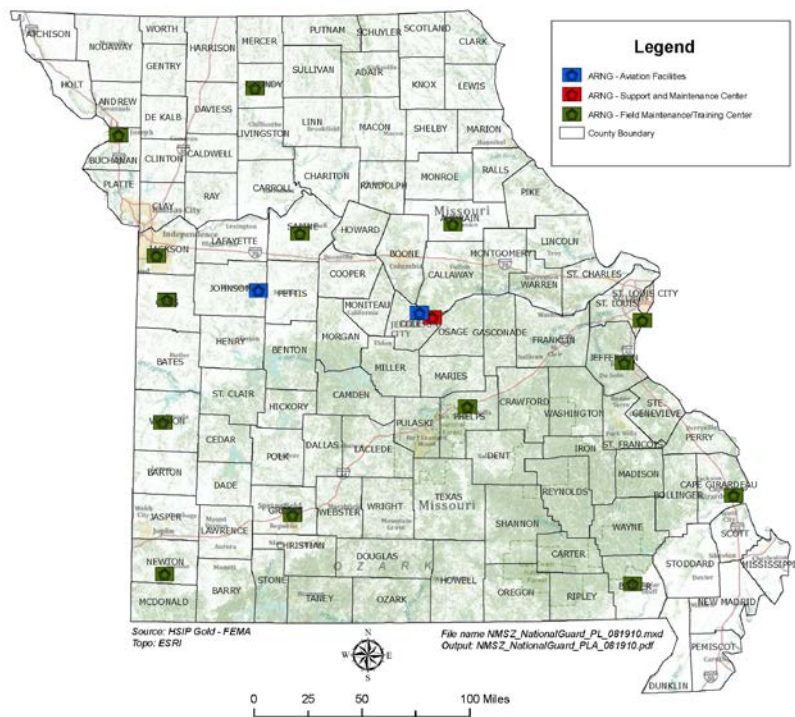
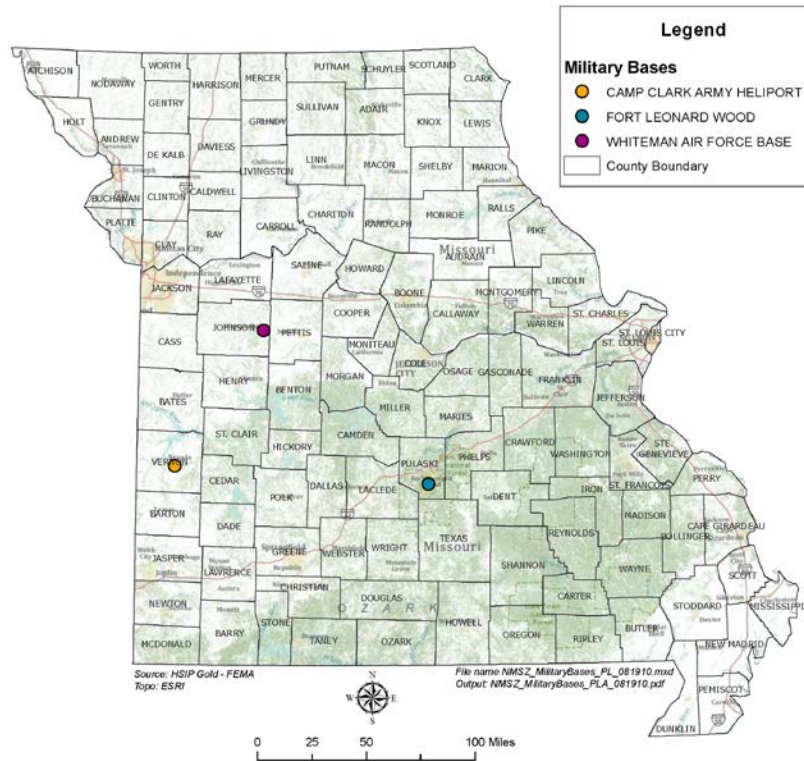
Under the State of Missouri's National Guard (MONG) OPLAN, MONG will provide Defense Support of Civil Authorities (DSCA) during/following a man-made or natural disaster upon request from the Governor of the State of Missouri and the State Emergency Management Agency (SEMA). The U.S. Department of Defense (DOD) will also provide DSCA within its authority. Military resources will be allocated to support the operational objectives determined by the Unified Coordination Group (UCG).

The NMSZ will require extensive military support operations. While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire State, including the 47 counties recognized by the state as vulnerable to negative impacts from a seismic incident. This OPLAN also acknowledges NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties nor the effects of after shocks are provided unless denoted.

Specific information about the NMSZ MAE Center Scenario and expected impacts is in the Base Plan of this document.

Figure C16-1 (two maps) shows military installations, military bases, and National Guard armories located within the State.

Figure C16-1 Military Installations



1.1 Purpose

The purpose of this appendix is to provide military support information for the State of Missouri and FEMA's OPLAN. Military resources will be used to provide support of civilian authorities as requested. Each annex identifies gaps and seams, enhancing unity of effort and linking existing plans. The Military Support Annex details the limitations, organization, and course of action to execute the roles and responsibilities assigned to the MONG and DOD during a NMSZ incident. Specifically, this appendix will provide Military Support Coordinators with the basis for evaluating and accepting or redirecting mission assignments and tasks received from SEMA, FEMA, or other ESFs in response to an earthquake event in the NMSZ. Both MONG and DOD have internal plans for disaster response; but this appendix also provides operational concepts unique to planning for and responding to a catastrophic earthquake, and assigns responsibilities to state and federal agencies to meet the needs of local governments following a catastrophic earthquake event.

1.2 Considerations

The following considerations are specific to Military Support. General considerations are included in Section 1.5 of the Base Plan.

- During a disaster, all levels of government are responsible for providing for the health, safety, and welfare of citizens. However, the extraordinary requirements of the NMSZ earthquake will significantly exceed the capability of most jurisdictions. Military Support may need to leverage all available resources to meet needs generated by the incident and early integration of military support authorities into operations is essential.
- While FEMA and SEMA have lead roles in facilitating and optimizing use of military support resources, they will rely on the support agencies to bring the required resources to bear. Participation in a holistic, coordinated emergency management effort is critical to achieve the most efficient, effective results.
- It will be vital to anticipate and develop Action Request Forms (ARF) and mission assignments at the very beginning of the event because of the time required to deploy DOD resources to the affected area.
- Movement to the affected area may be among the higher risk missions until search and rescue (S&R) begins.
- Air assets will likely be stretched to the maximum, and during the initial phases of the operations, air corridors may not be open initially to every Task Force area of operations.

1.3 Assumptions

- The majority of MONG forces are available to support DSCA operations.
- The situation will be fluid and response time for forces will be short.
- Forces will be in State Emergency Duty (SED) status.
- MONG will remain under the control and direction of the Governor of Missouri.
- All traditional emergency response protocols will remain in effect and the Joint Army / Air National Guard will not undergo any significant change in force structure, end strength or fiscal resources.
- MONG will continue to function as an operational reserve of the United States Army and the United States Air Force.

- The role, mission and command structure of Headquarters (HQ), Joint Command will be clarified. When activated, MONG will execute missions in support of an existing civilian Incident Command structure.
- Local civilian authorities will be the first responders to the incident.
- The USNORTHCOM Commander will issue selected categories of forces, as per the Chairman of the Joint Chiefs of Staff DSCA Execution Order (EXORD), prepare to deploy orders immediately after the incident has occurred and notification is received.
- Local Title 10 Military Commanders can deploy forces under Immediate Response Authority in support of local civilian authorities if requested in order to save lives, minimize human suffering, protect property, and maintain public confidence in the US Government and the DOD.
- Ground transportation routes into and out of the impacted areas will be unusable.

1.4 Limiting Factors

- DOD and MONG resources may be deployed in support of other missions.
- Transportation infrastructure may affect deployment timelines for all military assets.
- Federal restrictions on DOD Title 10 direct assistance to civil law enforcement. Except as otherwise provided, the prohibitions on the use of military personnel as a Posse Comitatus or otherwise to execute the laws prohibits the following forms of direct assistance:
 - A. Interdiction of a vehicle, vessel, aircraft, or similar activity.
 - B. A search or seizure.
 - C. An arrest, apprehension, stop and frisk, or similar activity.
 - D. Use of military personnel for surveillance or pursuit of individuals, or as undercover agents, informants, investigators, or interrogators.

2.0 Mission

The mission of Military Support is to provide necessary support of local and state response efforts when directed. To accomplish this mission, the Joint Forces Headquarters Missouri (JFHQ-MO) will provide one or more joint task force command and control elements able to conduct Command and Control (C2) in a State Active or Emergency Duty, Title 32 or Title 10 status in support of Homeland Defense, Defense Support of Civil Authorities (DSCA) or other domestic emergency mission.

When directed, USNORTHCOM will conduct DSCA operations in support of the lead federal agency in order to save lives, minimize human suffering, protect property, and maintain public confidence in the US Government and the DOD.

3.0 Execution

Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases of response within specified periods of time. A description of these Phases is in Section 3.3 of Annex C – Operations. Table C16-1 lists the (sub)phases of Phase 2 (Phases 2a, 2b, and 2c).

Table C16-1 Response Phase Operational Periods

Response Phase	Operational Period
2a – Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Employment/Sustained Response	E + 72 – E + 120 hrs +

The phases of response and operation are designed to be flexible as the complexity of the incident will determine the actual phases/periods.

3.1 Intent of Leadership

3.1.1 Senior Leaders Steering Committee

The Senior Leaders Steering Committee ensures a joint state/federal operational framework is designed to support the Governor's priorities, and is operationally aligned to ensure collective unity of effort to protect the citizens of Missouri. To achieve this, the Missouri Operational Plan will:

- Formalize the concept of employing a joint state/federal UCG.
- Use Incident Command System (ICS) concepts and principles consistent with the National Incident Management System (NIMS).
- Set conditions for synchronized application of ESF capabilities to demonstrate a timely unified response.

3.1.2 Commander's Intent

Missouri Nation Guard (MONG) Intent

MONG forces will deploy initially using organic assets and establish communications, conduct damage assessments, maintain public order, and coordinate relief operations in support of state and local authorities. The intent is for our military formations to have a forward presence as soon as possible. Very little if any warning will precede the catastrophe. Should a catastrophic earthquake at 6.5 magnitude or greater occur, this plan will be implemented immediately. MONG coordination with state and local agencies will ensure that local needs are met to the best of our ability. Redeployment will not occur until an effective handoff has been coordinated with State and local authorities responsible for that particular function or capability supported by MONG.

MONG will respond to multiple hazards and threats with Joint Task Forces (JTF) or Task Forces (TF). The JTF/TF will activate at the time of the threat or incident, based on mission analysis, forces available, and the appropriate annexes to the OPLAN.

- Possible DSCA operations may include:
 - Critical infrastructure, installation, area, and point security.
 - Crowd and traffic control.
 - Logistical support.
 - Temporary emergency shelter for emergency responders and the civilian populace.
 - Ground and aerial transportation/evacuation of emergency responders and civilians.
 - Limited emergency medical treatment, and ground or air medical evacuation.

- Air and ground search and rescue support.
- Fire fighting support.
- Communications support.
- Loan of resources in accordance with National Guard Regulation 500-1 / 10-8101 (1FEB96).
- Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) support. Respond to terrorist threat. Initial detection, analysis, modeling, technical and liaison support.
- Chaplain support services.
- Continuity of government and law enforcement.
- Damage assessments/incident analysis.
- Mortuary services.

Department of Defense (DOD) Intent

Anticipate and execute a timely and effective response in support of the primary agency in order to save lives, minimize human suffering, protect property, and maintain public confidence in the U.S. Government and the DOD. Provide appropriate DOD capabilities in a timely manner to assist civil authorities in providing necessary services and facilitating recovery as quickly as possible.

- Possible DSCA operations may include:
 - S&R.
 - Emergency medical response/care.
 - Patient transport/evacuation.
 - Life support functions.
 - Supply distribution.
 - Recovery support.
 - DOD facility support.
 - Mortuary affairs.
 - Safeing of utilities.
 - Infrastructure repair.
 - Debris clearance.
 - Environmental clean-up.

3.2 Concept of Operations

This OPLAN Annex provides the basis for the planning, implementing, and executing process for DSCA operations within the State of Missouri. It outlines a rapid and flexible response by MONG and DOD forces and provides for a clear chain of command for forces deployed to support DSCA operations.

3.2.1 General Concepts

MONG is prepared to execute the Cracked Earth Plan. Using MONG assets, Missouri's full and part-time staff will provide support of Missouri's 15 ESFs. Initial operations will support use of air assets and organization of their work force. Once mobilized, MONG is prepared to support the following:

- ESF-1 with air operations and reestablishment of transportation ingress/ egress routes and key airfields
- ESF-2 with communications assets
- ESF-3 with heavy equipment and operators to remove debris and restore critical infrastructure
- ESF-4 with firefighting resources
- ESF-5 with assets for the Joint Rapid Needs Assessment Flights
- ESF-6 with support for mass care operations including evacuation management and shelter support
- ESF-7 with support for logistics operations
- ESF-8 with health and medical resources
- ESF-9 with light S&R resources and the movement of highly specialized teams including MO-TF1
- ESF-10 with the Civil Support Team (CST)
- ESF-12 with energy supplies from generators and other resources
- ESF-13 with law enforcement augmentation in support of Missouri State Highway Patrol (MSHP) and local authorities
- ESF-15 in delivery of public information.

3.2.2 Phased Response Concepts

3.2.2.1 Phase 2a: Immediate Response

Purpose of Phase

The purpose of Phase 2a is to activate and prepare Military Support for deployment to the affected area in order to support civilian authorities. Military Support will activate along with SEMA's State Emergency Operations Center (SEOC) and FEMA's Regional Response Coordination Center (RRCC) to provide an effective and coordinated effort in supporting emergency responders and ESFs within affected and non-affected areas.

End State of Phase

This phase ends when sufficient forces and equipment have been staged, and the initial response forces are ready for deployment.

MONG Mission-essential Tasks

On receipt of an executive order from the Governor and/or a catastrophic event, and SEMA's request to the Joint Operations Center (JOC) for assistance from MONG:

1. MONG will execute its Cracked Earth Plan.
2. The JOC will issue a Warning Order to an Army and/or Air unit for a TF/JTF.

REDACTED

3. Senior Commands will make a tentative plan, alert troops, start movement, establish a TOC, and coordinate with the local agency that requested the support.
4. Senior Commands will identify a central location within key graphic areas to conduct Reception, Staging, and Onward Integration (RSOI) operations.
5. MONG will assesses the situation and discuss courses of action with local, state, and federal agencies.
6. MONG and DOD will support SEMA and the Missouri Information Analysis Center (MIAC) with damage assessment information.
7. Emergency Management Assistance Compact (EMAC) forces received from outside the State will report to the designated Joint Reception Staging/Onward Integration (JRSOI) site.
8. MONG elements will conduct RSOI procedures at home station.
9. As required, JFHQ-MO will alert and activate assigned units to establish and man designated JRSOI sites.
10. JFHQ-MO will establish contact with supporting state headquarters to begin coordination with units arriving from outside the State.
11. EMAC forces will stop at the JRSOI site to be given a brief by a Liaison Officer (LNO) from their gaining TF in order to acquire an understanding of their Area of Responsibility (AOR), mission, routes, communications, and other critical information required.
12. The JFHQ/JTF-MO controls inbound EMAC units by managing numbers, types, and sequencing of forces requested, based upon confirmed mission requirements, and reports their arrival to respective TF commanders.

Joint Forces Headquarters Missouri

1. Identify and deploy a C2 headquarters under Tactical Control (TACON) or Operational Control (OPCON) to this headquarters to assume responsibility of JTF/TF elements.
2. Constitute and deploy units TACON/OPCON to the JTF/TF.

Headquarters, Missouri Air National Guard

1. Identify and deploy a C2 headquarters under TACON to this headquarters to assume responsibility of JTF/TF.
2. Constitute and deploy units TACON/OPCON to the JTF/TF.
3. Deploy tasked units to the JTF/TF to support TF communications requirements.
4. Pre-position Air National Guard (ANG) equipment:
 - a. Engineer equipment/barrier materials
 - b. Petroleum, oil, and lubricants (POL)
 - c. Generators
 - d. Hazmat materials
 - e. REDACTED
 - f. REDACTED
 - g. Sandbags

Directorate of Plans, Operations, and Training

1. Reinforce or activate JOC to include appropriate support center personnel.
2. Provide appropriate staffing coverage.
3. Operate in support of the SEMA.
4. Assign and deploy MONG LNOs as needed to critical forward sites, regional SEMA sites, and governmental agencies.
5. Monitor Army National Guard (ARNG) and Air National Guard (ANG) unit strength and disposition to ensure appropriate force structure capability is present to meet predicted operational needs.
6. Coordinate with SEMA and/or local responders to identify appropriate MONG response.
7. Assist Army Senior Command and Air Wings in coordinating transportation requirements to include routes of march, MSRs, and convoy clearances.
8. Coordinate with MSHP to ensure MONG vehicles have priority of movement on main supply routes and / or avenues of approach to the incident site.
9. Facilitate and coordinate Army Aviation mission requirements.

Directorate of Logistics

1. Plan for pre-positioning of ARNG equipment so items can be expedited to the affected area.
2. Alert all Financial Management Support (FMS) Shops to support State Emergency Duty (SED) deployment.

Directorate of Information Management

1. Establish communications to support continuity of operations.
2. Coordinate with the Director of Military Support (DOMS) and provide communications assets and support for key personnel.
3. Provide communications assets and support of senior commands and other entities, as directed by the J-3.

7th Weapons of Mass Destruction Civil Support Team (CST)

1. Maintain 24-hour Initial Response Team capability.
2. Advise civilian responders regarding appropriate actions.
3. Facilitate requests for assistance to expedite arrival of additional state and federal assets to help save lives, prevent human suffering and mitigate property damage.
4. Provide CBRNE support.
5. Facilitate CBRNE Emergency Response Force Package (CERFP) integration into Incident Command structure during CBRNE response.

35th Combat Aviation Brigade

1. Conduct aviation and reconnaissance operations.
2. Operate aviation fuel distribution points.
3. Conduct airspace management.

4. Conduct air rescue hoist operations.

DOD Mission-essential Tasks

1. DOD will activate and provide Defense Coordinating Officer (DCO), Defense Coordination Element (DCE), Regional Emergency Preparedness Liaison Officer (REPLO), and State Emergency Preparedness Officer (SEPLO) to the region.
2. Conduct situational assessment in conjunction with the lead federal agencies to determine the extent of damage and to anticipate DOD asset requirements.
3. Coordinate with activated ESFs in the RRCC and with the Incident Management Team (IMT).
4. Coordinate with JFHQ-MO directly for the non-federalizing National Guard capabilities and ongoing response activities in the JOA.
5. Monitor non-federalized National Guard operations executed under the EMAC.
6. Deploy DCO/DCE to FEMA Emergency Operations Centers (EOC), RRCC or JFO when established to coordinate specific requirements for Defense Support to Civil Authorities.
7. Deploy LNOs, SEPLOs, and Joint Regional Medical Planning Officers (JRMPO).
8. Notify USNORTHCOM of Base Support Installation (BSI) availability within the region to facilitate BSI nomination and selection.
9. Support FEMA in the coordination and validation of the Incident Support Base (ISB) Mission Assignment.
10. Employ C2 elements and assignments of JOA.
11. Continue coordination with National Guard, federal agencies and state, local and tribal governments to ensure unity of effort.
12. DOD Commanders in the proximity of the incident may provide assistance under Immediate Response Authority in response to a request from civil authorities, in order safe lives, prevent human suffering and mitigate great property damage.
13. Validate requests from the FCO.
14. Establish the DCE.
15. Establish liaison among military, state, and other federal agencies for support.
16. Provide a LNO, as required, to each activated ESF.
17. Coordinate with the FCO and other ESFs for defense support.
18. Coordinate with the FCO and other ESFs for support of defense support providers.
19. Work with the FCO and SCO to integrate the missions of National Guard on State Active Duty (SAD) with active units to maximize responses while avoiding duplication of effort.
20. Acknowledge response priorities established by the FCO and SCO for the disaster area.
21. Develop a priority of work for supporting units.
22. Maintain an audit trail of mission requests to ensure each tasking is supported by a valid request and/or mission assignment number. The audit trail should include estimated and actual costs of support for each mission.
23. DCO/DCE is responsible for accountability and reporting of Title10/DOD personnel deployed to the JOA until a JTF is established.

24. Contact DoD Title 10 installations to determine identification and deployment of immediate response forces/capabilities and confirm availability of catalogued DSCA capabilities.

3.2.2.2 Phase 2b: Deployment

Purpose of Phase

Continue to identify and deploy military resources to the affected areas as more areas become accessible in order to assist emergency response operations.

End State of Phase

Military assets and resources are properly deployed and continue to meet the needs of the emergency responders and affected population.

MONG Mission-essential Tasks

1. TF/JTF will be ordered to execute DSCA operations in accordance with the issued Operations Order (OPORD) referencing this OPLAN and the appropriate annexes.
2. If the TF-JTF commander and forces have not been designated previously, they will be designated at this time. Forces designated to support a DSCA mission may consist of voluntary or involuntary called up individuals or units, depending on the disaster or incident.
3. As the scope and magnitude of the required support diminishes, the JOC will coordinate with SEMA and the primary supported agencies while planning for transition.
4. Commanders will give input to the JOC as to the anticipated duration of the MONG mission and other resources needed.
5. Defense support will not normally be furnished if it competes with private enterprise or the civilian labor force unless so directed by SEMA. In any case, the commander on the ground should have an OPORD or Fragmentation Order (FRAGO) assigning the mission from higher headquarters before executing that mission. In the case of loss of life or property, the latter may not apply.
6. TF Commanders (CDR) deploy LNO teams to establish and maintain liaison with local county and city governments that require support within the AOR.
7. JFHQ/JTF-MO should prepare to support state Bridge Assessment Teams.
8. TF HQ's receive OPCON units to form the TF and establish staging areas.
9. TFs will support state agency requests for aerial or ground route reconnaissance.
10. TFs stage units and initiate disaster relief response and training.
11. TFs deploy to the staging areas.
12. As units move from their armories/installations to their staging areas, they are to report to higher HQ and move as directed.
13. The use of advanced party (ADVON) is essential during the movement phase. If movement to the staging areas is halted, communications should continue by the most expedient means to include military or MSHP communications.
14. Units will move as directed to the staging areas and then to the response sites.
15. TF Commanders will commit formations to the affected area based on requests and coordination within their AOR from the local political subdivisions.

16. Reassignment to other areas and missions will require TF commander authorization.
17. During this catastrophic event, many local, state, and federal agencies will be moving in and out of the affected areas. In order to shape the statewide AOR, the following planning guidance is provided:
 - a. Primary and alternate ingress and egress routes to the affected area will be identified and opened if not accessible.
 - b. Once the initial assessment on major highways and bridges is complete, priority of rotary wing support will be given to TF commanders who are delayed in reaching their staging areas. Priority of effort for aviation support will be: initial damage assessment of ingress/egress routes for TFs, C2 Operations, and then sustainment operations.

Headquarters, Missouri Air National Guard

Identify shortfalls in mission-critical equipment.

Directorate of Personnel

Maintain daily personnel status of all deployed MONG elements during the incident.

Director of Intelligence

1. Implement situational awareness and force protection activities in support of DSCA operations.
2. Recommend Commander's Critical Information Requirements (CCIR) for approval from The Adjutant Governor (TAG).
3. Provide a Force Protection Update (FPU) every 12 hours during the incident mission.
4. Monitor criminal activity directed at MONG assets and report.
5. Provide extended weather forecasts.

Directorate of Logistics

1. Coordinate with Army Senior Commands and Air Wings of the National Guard to identify shortfalls in mission-critical equipment.
2. Maintain record of all MONG resources consumed by the state emergency mission in order to recapture costs associated with the SED event.
3. Coordinate maintenance operations with supported units to ensure Class IX, recovery, repairs, and services are performed if no organic maintenance capability exists.
4. Conduct technical inspections of unit equipment during the redeployment phase in order to accurately document the status of equipment to ensure full reimbursement for maintenance, repairs, and repair parts.
5. Coordinate with other services through the U.S. Property Affairs Office USPFO, to allow for the loan of mission-critical equipment that may be needed.

Directorate of Strategic Planning

1. Plan future mission requirements a minimum of 3 days out.
2. Support JOC operations. Provide appropriate staffing coverage. Operate in support of SEMA.

U.S. Property Affairs Office

Assist the Directorate of Logistics in filling critical equipment shortages.

State Public Affairs Office

1. Coordinate with the state ESF-15 – Public Affairs to ensure consistent and coordinated public information.
2. Provide MONG internal public release coordination with:
 - a. J3,
 - b. Chief of Staff (COS)
 - c. TAG
 - d. SEMA
 - e. Missouri Department of Public Safety
 - f. Governor's Office
3. Provide Public Affairs (PA) guidance and coordinate with operations, plans, policy and other interagency, NGB and USNORTHCOM PAOs as needed.
4. Provide a release to media, after an event.
5. Provide press operational access rules and security procedures specified by the OPLAN.
6. Record the activities of MONG forces and the incident for historical purposes and immediate intelligence use.
7. Maintain liaison with JIC.

Chaplain

1. Support mobilized units by providing religious services, spiritual health/fitness screenings, pastoral care and counseling, and identification and referencing of soldiers needing further care.
2. Provide pastoral care to the community by training and utilizing volunteers to strengthen religious support throughout impacted area.

35th Engineer Brigade

1. Provide horizontal and vertical construction support.
2. Transport/operate heavy equipment.
3. Provide infrastructure damage assessment and reconnaissance support.

70th Troop Command

1. Provide security.
2. Provide medical support.
3. Conduct transportation operations.
4. Provide National Guard Response Force (NGRF)/Quick Reaction Force (QRF).

110th Maneuver Enhancement Brigade

1. Conduct JRSOI operations.
2. Establish and operate logistics support areas (LSA).
3. Conduct transportation operations.

1107th Theater Aviation Sustainment Maintenance Group

1. Conduct airfield management operations.
2. Provide aviation maintenance support.

Medical Command

Augment the 70th Troop Command by providing medical support.

131st Bomb Wing

1. Protect national assets.
2. Provide engineering support.
3. Conduct security operations.
4. Provide medical support.

139th Airlift Wing

1. Protect national assets.
2. Conduct security operations.
3. Conduct airspace management.
4. Provide engineering support.
5. Conduct air lift operations.
6. Provide medical support.

157th Air Operations Group

1. Conduct airspace management planning and coordination.
2. Provide incident assurance awareness support.

DOD Mission-essential Tasks

This phase begins when DSCA response operations commence in the JOA. Key tasks are Evacuation, S&R, Emergency Medical Response, and Initial Damage Assessment. Further requests for DOD assistance are anticipated from civil authorities. Those actions include:

1. Establish and operate BSI in support of Title 10 response forces.
2. Conduct JRSOI operations for activated Title 10 forces and integrate into the response.
3. Providing DSCA as requested by FEMA and approved by the Secretary of Defense (SecDef) to execute Mission Assignments. DSCA operations may include, but are not limited to:
 - a. S&R
 - b. Emergency medical response/care
 - c. Patient transportation/evacuation
 - d. Life support functions
 - e. Supply distribution
 - f. Recovery support
 - g. DOD facility support
 - h. Support fatality management operations

- i. Wellness checks
 - j. Safeing of utilities
 - k. Infrastructure repair
 - l. Debris clearance
 - m. Environmental cleanup
 - n. Facilitation of ground access and egress from incident area.
4. Distribution of supplies (through DLA) and Defense Fuels, and distribution of supplies (rations, water, canvas, tents, cots, sandbags, bulk fuel, etc.) if requested by mission assignment.
5. Initiating Transition/Redeployment Planning.
6. Capture and report costs.

3.2.2.3 Phase 2c: Employment/Sustained Response

Purpose of Phase

Continue to identify and deploy assets to the affected area as more areas become accessible.

End State of Phase

End state for this phase will be when earthquake response/recovery requirements no longer exceed the capabilities of civil authorities, and military assistance is no longer needed.

MONG Mission-essential Tasks

1. Continue to monitor and assess the situation and support local responders to stabilize the incident.
2. Continue to provide resources and equipment at critical facilities in accordance with state priorities.
3. Continue to provide guidance and ensure controls are in place to protect responders and the public.
4. Continue to provide situational awareness, including modeling of current and forecasted impacts.
5. Assist state and local agencies to develop a common operating picture on coordination with the SEOC.
6. Continue to provide mission support as needed.
7. Provide reports and information to senior leadership as requested.

Chaplain

1. Hand over religious support of civilian authorities as MONG forces redeploy.
2. Follow up with soldiers identified as needing further care.

DOD Mission-essential Tasks

1. Continue providing DSCA as requested by FEMA and approved by SecDef to execute mission assignment. DSCA operations may include, but are not limited to:
 - a. S&R
 - b. Emergency medical response/care
 - c. Patient transportation/evacuation

- d. Life support functions
 - e. Supply distribution
 - f. Recovery support
 - g. DOD facility support
 - h. Support fatality management operations
 - i. Wellness checks
 - j. Safeing of utilities
 - k. Infrastructure repair
 - l. Debris clearance
 - m. Environmental clean-up
 - n. Facilitation of ground access and egress from incident area
2. Continue Transition/Redeployment Planning.
3. Continue capturing and reporting of costs.
4. Continue a sustainable joint communication capability with federal, state, and local officials.
5. Continue to assess critical infrastructure and utilities, and maintain awareness of restoration.
6. Continue to monitor and assess the situation and support local responders in stabilizing and recovering from the incident.
7. Continue to provide mission support as needed.
8. Provide reports and information to senior leadership as requested.

4.0 Oversight, Coordination and Communications

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Incident Command

4.1.2 State

- Missouri National Guard

4.1.3 Federal

- Department of Defense

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Law Enforcement
- Local Fire Department
- Local Emergency Medical

- Non-governmental Agencies

4.2.2 State

- Civil Air Patrol

4.2.3 Federal

- U.S. Coast Guard
- Department of State

5.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

Missouri concept of operation is to use the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process or within the response authorities of select agencies. Both the request for EMAC and federal resources are managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

- The Governor of Missouri will declare a disaster.
- SEMA will open an EMAC event in the EMAC Operations System.
- Missouri will request assets based on mission assignment.
- The assisting state will detail the available assets and estimated costs back to SEMA.
- SEMA will approve the resource and cost.
- The resource from the assisting state will mobilize and deploy.

For resources that are not available through the EMAC, the State of Missouri will submit a federal Action Request Form (ARF). The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136.

5.1 Pre-scripted Requests for EMAC Assistance – REDACTED

Table C16-2 Pre-Scripted EMAC Requests

5.2 Pre-scripted Requests for Federal Assistance - REDACTED

Table C16-3 Pre-Scripted Action Request Forms

REDACTED

Annex D – Logistics Management and Resource Support

Joint Missouri & Region VII Response
Operations Plan

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

**Annex D, ESF-7
Logistics Management and Resource Support**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

This Annex to the New Madrid Seismic Zone (NMSZ) Joint State of Missouri & Region VII Response Operations Plan (OPLAN) defines the concept of operations for Emergency Support Function (ESF)-7 – Logistics. The Annex describes the concept of logistics for supporting local and state response activities following a major NMSZ earthquake. Due to airport, bridge, and road damage described herein, logistics and resource operations are supported significantly via rotary wing operations. Figure D1 indicates the concept for moving commodities and resources to support emergency operations.

Figure D1 Concept for Logistics and Resource Support

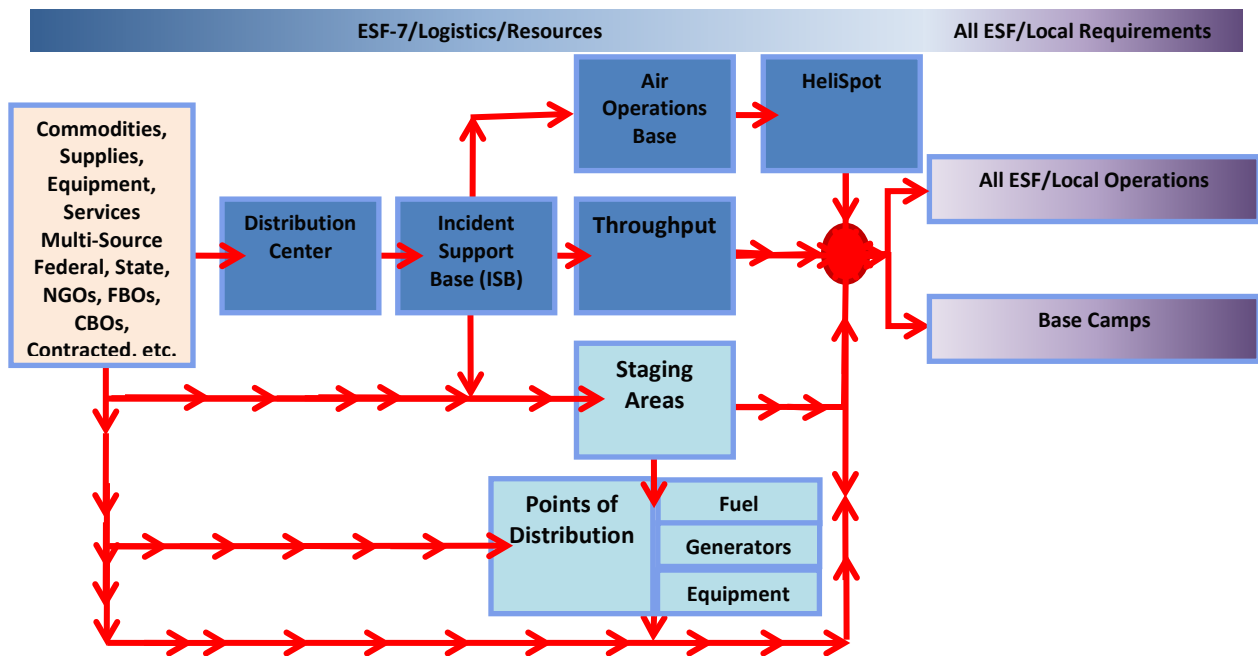


Figure D1 indicates the necessary types of facilities to support logistics and resource operations as defined below:

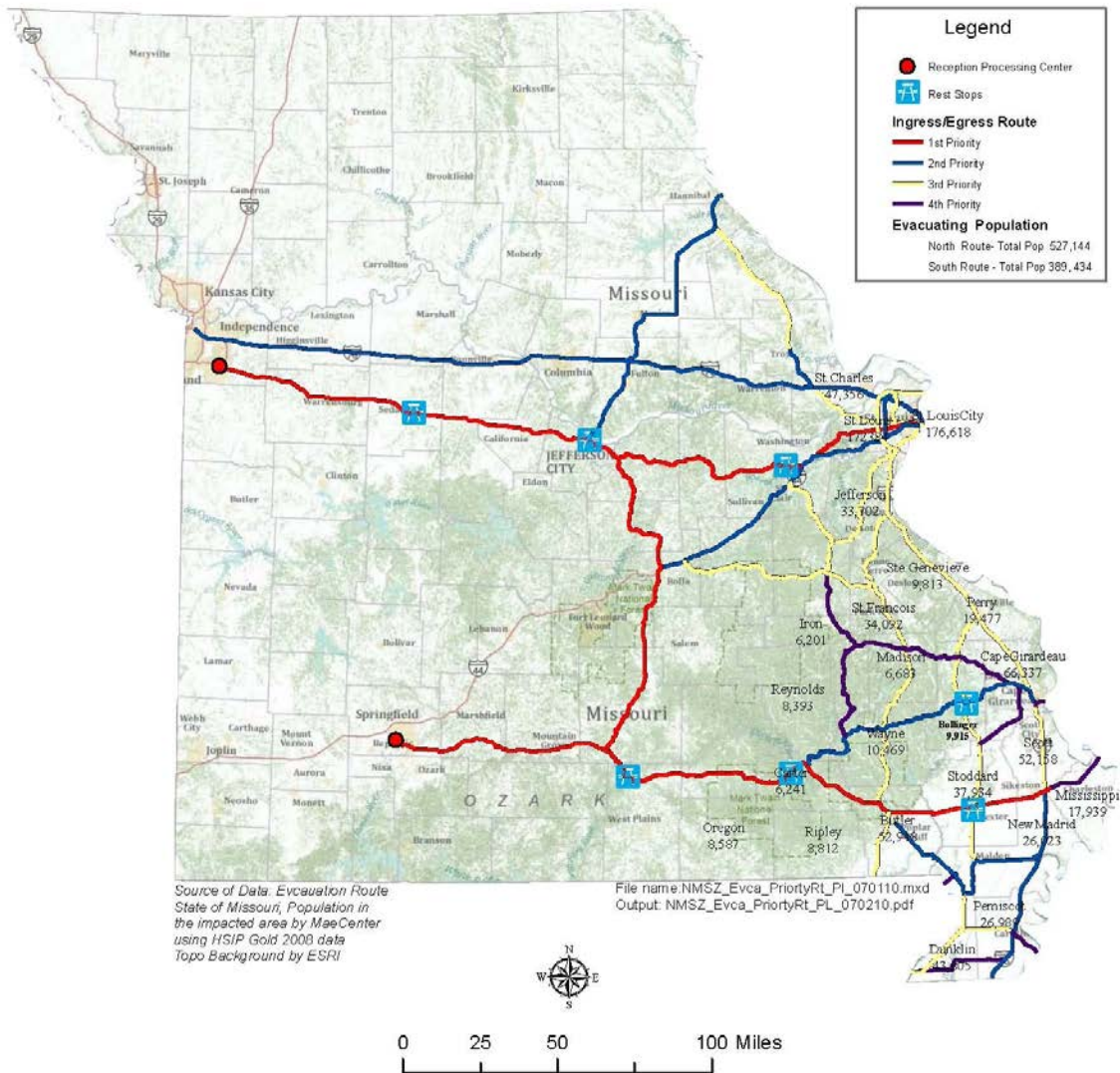
- **Distribution Centers** – An off-incident temporary facility at which commodities, personnel, supplies, and equipment are pre-positioned for deployment to an incident when requested by an Incident Management Assistance Team (IMAT). Distribution Centers are managed by National Logistics in the Federal Emergency Management Agency (FEMA) Headquarters. A Distribution Center may also provide temporary support services, such as food and billeting, for personnel before their assignment, release, or reassignment and serve as a place for out-processing following demobilization as personnel await transportation. Anticipated number of Distribution Centers in Missouri: 1 to 2
- **Incident Support Bases (ISB)** – A temporary facility at which primary logistic support activities are conducted. Resources are received from Distribution Centers or other sources and distributed to staging areas, air operations bases, or directly to Points of Distribution (POD). Anticipated number of ISBs in Missouri: 2 to 4.
- **Staging Areas** – A location to which incident personnel, equipment and initial response resources are assigned awaiting tactical assignment and may include both state and federally operated facilities. Anticipated number of Staging Areas in Missouri: 8 to 16.

- Air Operations Bases – Similar to staging areas, Air Operations Bases serve as a location to which incident personnel, equipment and initial response resources are assigned awaiting tactical assignment. As the name implies, Air Operations Bases support rotary wing operations in and out of the impact zone. Anticipated number of Air Operations Bases in Missouri: 8 to 12.
- Helispots – A location from which helicopters can take off and land that also may be used for temporary loading. Helispots feed resources into the impact zone to support PODs, evacuation, and other emergency operations as necessary. Anticipated number of helispots in Missouri: 23 to 30.
- Points of Distribution (POD) – A centralized location from which resources are distributed to support individuals as well as various response operations. Individuals can obtain life sustaining commodities at PODs following a declared emergency or disaster including shelf-stable meals, tents, tarps, bottled water, and medications. Other PODs will support response operations through provision of equipment and supplies. In both cases, resources may bypass staging areas for direct delivery to PODs depending on the circumstances. Anticipated number of PODs in Missouri: 161 to support individuals; 10 to 20 to support response operations.

Because it is impossible to know which facilities will sustain an earthquake without significant damage, a number of primary, secondary, and tertiary sites have been identified to support each type of facility. These potential sites are presented in Section 5.4, Resource and Logistics Operational Facilities. The model in Figure D1 is premised on local support of POD operations and shelters and state support of staging areas and base camps via state personnel, contracted support, and mutual aid support. In Missouri, state-level responsibility for bulk commodities distribution at the local level has been delegated to ESF-6.

Due to road and bridge damage and the projected available transportation routes, operations within the State of Missouri are outlined as Northern and Southern Operations as described in Figure D2 below. Priority routes are subject to change based on initial assessment following an earthquake event. As shown in the figure, ground transportation operations are likely to occur between the St. Louis area and Kansas City via US Highway 100 to US Highway 50 and/or Interstate 70 and between Southeast Missouri and Springfield via US Highway 60. These four-lane highways provide the best opportunity to support ground operations to and from the impact zone. As other roads are assessed post-earthquake and debris clearance is completed, additional ground operations may be possible.

Figure D2 Evacuation Map, Northern and Southern Routes



According to modeling data from the Mid-America Earthquake (MAE) Center, a NMSZ earthquake is expected to directly impact on 22 Missouri counties and the City of St. Louis. While the MAE Center acknowledges and provides data for only 22 Missouri counties, this OPLAN addresses the entire State, including the 47 counties recognized by the State as vulnerable to negative impacted by a seismic incident. This OPLAN also acknowledges the NMSZ aftershocks may be more severe than the initial earthquake. However, neither data from the additional 25 counties or the effects of aftershocks are provided unless noted.

Out of an impacted population of 2,371,286 (2009 Census Projection), the MAE Center projects a total of 686 fatalities and 13,434 injuries. Other damage statistics identified by the MAE Center that will impact resource and logistics operations are provided in Tables D1-D3:

REDACTED

Table D1 Impact Data

Data Point	Quantity
Displaced individuals (2.7 persons/household)	842,002
Projected Shelter Capacity:	907,303
Pets (dogs and cats) requiring shelter	129,191
Tons of debris created	6,500,000
Tons of brick, wood	2,900,000
Tons of steel and concrete	3,600,000

Source: MAE Center

Table D3 General Commodity Needs

Commodity	Quantity	Units/Notes
Meals	4,742,572	2/person/day, daily need
Water	7,113,858	3 liters/person/day, daily need
Blankets	4,742,572	2/person, one-time need
Cots	2,371,286	1/person, one-time need

Source: FEMA Calculations using 2009 Census Data

Table D2 Facility Damage

Damaged Facilities	Quantity
Hospitals	7
Fire Stations	69
Police Stations	53
Schools	136
Bridges	1004
Airports	28
Ports	51
Railroad Facilities	23
Railroad Bridges	2
Dams	6
Levees	25
Hazardous Material Facilities	29
Total Buildings Damage	1433

Source: MAE Center

Throughout the response phase (Phase 2), it is assumed that roads, bridges, and other transportation infrastructure will be heavily damaged necessitating major rotary wing operations. When and where possible ground transportation will be utilized to support ESF-7 operations. Additional situational analyses regarding resource needs are provided in Tables D4-D6:

Table D4 Shelf Stable Meals per Day by County

County	Population (2009 Census)	Meals (2/person/day)	Trailers/Truck (21,312/trailer)	Pallets (576/pallet)
Bollinger	11,841	23,682	1.11	41.11
Butler	41,471	82,942	3.89	144.00
Cape Girardeau	73,957	147,914	6.94	256.80
Carter	5,870	11,740	0.55	20.38
Dunklin	31,039	62,078	2.91	107.77
Iron	9,943	19,886	0.93	34.52
Jefferson	219,046	438,092	20.56	760.58
Madison	12,341	24,682	1.16	42.85
Mississippi	13,266	26,532	1.24	46.06
New Madrid	17,480	34,960	1.64	60.69
Oregon	10,291	20,582	0.97	35.73
Pemiscot	18,193	36,386	1.71	63.17

REDACTED

Table D4 Shelf Stable Meals per Day by County

County	Population (2009 Census)	Meals (2/person/day)	Trailers/Truck (21,312/trailer)	Pallets (576/pallet)
Perry	18,847	37,694	1.77	65.44
Reynolds	6,202	12,404	0.58	21.53
Ripley	13,395	26,790	1.26	46.51
Saint Charles	355,367	710,734	33.35	1233.91
Saint Francois	63,884	127,768	6.00	221.82
Saint Louis	992,408	1,984,816	93.13	3445.86
Saint Louis City	356,587	713,174	33.46	1238.15
Sainte Genevieve	17,542	35,084	1.65	60.91
Scott	40,855	81,710	3.83	141.86
Stoddard	29,069	58,138	2.73	100.93
Wayne	12,392	24,784	1.16	43.03
Total	2,371,286	4,742,572	223	8,234
Early after the incident, shelf-stable meals will be needed within the impact zone. After the initial shipments, truck loads may be diverted to shelters and PODs based on identified usage rates. <i>Source: FEMA Calculations using 2009 Census Data</i>				

Table D5 Drinking Water Needs Per Day by County

County	Population (2009 Census)	Water (3 liters/ person/day)	Trailers (18,000 liters/trailer)	Pallets (900/pallet)
Bollinger	11,841	35,523	1.97	39.47
Butler	41,471	124,413	6.91	138.24
Cape Girardeau	73,957	221,871	12.33	246.52
Carter	5,870	17,610	0.98	19.57
Dunklin	31,039	93,117	5.17	103.46
Iron	9,943	29,829	1.66	33.14
Jefferson	219,046	657,138	36.51	730.15
Madison	12,341	37,023	2.06	41.14
Mississippi	13,266	39,798	2.21	44.22
New Madrid	17,480	52,440	2.91	58.27
Oregon	10,291	30,873	1.72	34.30
Pemiscot	18,193	54,579	3.03	60.64

REDACTED

Table D5 Drinking Water Needs Per Day by County

County	Population (2009 Census)	Water (3 liters/ person/day)	Trailers (18,000 liters/trailer)	Pallets (900/pallet)
Perry	18,847	56,541	3.14	62.82
Reynolds	6,202	18,606	1.03	20.67
Ripley	13,395	40,185	2.23	44.65
Saint Charles	355,367	1,066,101	59.23	1184.56
Saint Francois	63,884	191,652	10.65	212.95
Saint Louis	992,408	2,977,224	165.40	3308.03
Saint Louis City	356,587	1,069,761	59.43	1188.62
Sainte Genevieve	17,542	52,626	2.92	58.47
Scott	40,855	122,565	6.81	136.18
Stoddard	29,069	87,207	4.84	96.90
Wayne	12,392	37,176	2.07	41.31
Total	2,371,286	7,113,858	395	7,904
Early after the incident, water will be needed within the impact zone. After the initial shipments, truckloads may be diverted to shelters and PODs based on identified usage rates. <i>Source: FEMA Calculations using 2009 Census Data</i>				

Table D6 Blankets and Cots Needed by County

County	Population (2009 Census)	Blankets (2 per person per day)	Trailers (4,500 blankets per/trailer)	Pallets (225 per pallet)	Cots (1 person per day)	Trailers (700 cots per trailer)
Bollinger	11,841	23,682	5.26	105.25	11,841	16.92
Butler	41,471	82,942	18.43	368.63	41,471	59.24
Cape Girardeau	73,957	147,914	32.87	657.40	73,957	105.65
Carter	5,870	11,740	2.61	52.18	5,870	8.39
Dunklin	31,039	62,078	13.80	275.90	31,039	44.34
Iron	9,943	19,886	4.42	88.38	9,943	14.20
Jefferson	219,046	438,092	97.35	1947.08	219,046	312.92
Madison	12,341	24,682	5.48	109.70	12,341	17.63
Mississippi	13,266	26,532	5.90	117.92	13,266	18.95
New Madrid	17,480	34,960	7.77	155.38	17,480	24.97
Oregon	10,291	20,582	4.57	91.48	10,291	14.70

REDACTED

Table D6 Blankets and Cots Needed by County

County	Population (2009 Census)	Blankets (2 per person per day)	Trailers (4,500 blankets per/trailer)	Pallets (225 per pallet)	Cots (1 person per day)	Trailers (700 cots per trailer)
Pemiscot	18,193	36,386	8.09	161.72	18,193	25.99
Perry	18,847	37,694	8.38	167.53	18,847	26.92
Reynolds	6,202	12,404	2.76	55.13	6,202	8.86
Ripley	13,395	26,790	5.95	119.07	13,395	19.14
Saint Charles	355,367	710,734	157.94	3158.82	355,367	507.67
Saint Francois	63,884	127,768	28.39	567.86	63,884	91.26
Saint Louis	992,408	1,984,816	441.07	8821.40	992,408	1417.73
Saint Louis City	356,587	713,174	158.48	3169.66	356,587	509.41
Sainte Genevieve	17,542	35,084	7.80	155.93	17,542	25.06
Scott	40,855	81,710	18.16	363.16	40,855	58.36
Stoddard	29,069	58,138	12.92	258.39	29,069	41.53
Wayne	12,392	24,784	5.51	110.15	12,392	17.70
Total	2,371,286	4,742,572	1,054	21,078	2,371,286	3,388

Source: FEMA Calculations using 2009 Census Data

Tables D7-D13 on the following pages show resource calculations for pediatric needs by county per day. These calculations were developed based on 2009 Census data for each county within the 0-4 age group. Calculations are also based on rates and quantities developed by the National Commission on Children and Disasters¹ (Commission).

The Commission recommends state and local jurisdictions provide caches of supplies to support the care of children for a minimum of 72 hours. Additional supplemental information developed by the Commission for various pediatric resources is provided below in Table D7.

Table D7 National Commission on Children and Disasters, Supplement to Pediatric Resourcing

Pediatric Resource	Comment
Baby Food	Should consist of a combination of vegetables, fruits, cereals, and meats.
Healthy Snacks	Should be safe to eat and not pose a choking hazard (intended for children 2 years and older). Should be low sugar, low sodium such as yogurt, applesauce, fruit dices (soft) (e.g., peaches, pears, bananas), veggie dices (soft) (e.g., carrots), 100% real fruit bite-sized snacks, real fruit bars (soft), low sugar/whole grain breakfast cereals and/or cereal bars, crackers (e.g., whole grain, "oyster"/mini)
Cereal	Should be single grain such as rice, barley, oatmeal or a combination of these grains

¹ Supplies for Infants and Toddlers in Mass Care Shelters and Emergency Congregate Care Facilities, National Commission on Children and Disasters, June 2010

REDACTED

Annex D – Logistics Management and Resource Support

Joint Missouri & Region VII Response Operations Plan

Pediatric Resource	Comment
Formula, milk-based, ready to feed (already mixed with water)	<p>Breastfeeding is the best nutritional option for children and should be strongly encouraged.</p> <p>Use of a powdered formula, is at the discretion of the jurisdiction or shelter operator. If using powdered preparation of the formula should be conducted by appropriately trained food preparation workers. Water used should be from an identified potable water source (bottled water should be used if there is any concern about the quality of tap or well water).</p> <p>Hypoallergenic hydrolyzed formula can be provided in powdered form—(1) 400-gram can—but only if potable water is accessible.</p>
Formula, hypoallergenic-hydrolyzed protein, ready to feed (already mixed with water)	
Formula, soy-based, ready to feed (already mixed with water)	
Oral Electrolyte	<p>Should be a solution for children, ready-to-use, unflavored (e.g. Pedialyte).</p> <p>Should be dispensed by medical/health authority in shelter</p> <p>Do not use sports drinks. The exact amount to be given, and for how long, should be determined by an appropriate medical authority (doctor or nurse).</p> <p>To be used in the event an infant/child experiences vomiting or diarrhea, and the degree of dehydration.</p>
Nutritional Supplement Drinks	<p>Should be specifically for kids/children, ready-to-drink (e.g., Pediasure, Kids Essential/Kids Boost).</p> <p>Should be dispensed by medical/health authority in shelter.</p> <p>Not intended for infants under 12 months of age.</p> <p>Requirement is a total of 40-120 fluid oz. per day in no larger than 8 oz bottles.</p>
Infant feeding bottles	<p>Should be 4-6 oz. size to address lack of refrigeration.</p> <p>Plastic only.</p>
Infant Feeding Spoons	<p>Specifically designed for feeding infants with a soft tip and small width.</p> <p>Can be used for younger children as well.</p>
Nipples for Baby Bottles	2 per bottle, non-latex standard.
Diaper Rash Ointment	Small bottles or tubes (petroleum jelly or zinc oxide based).
Disposable Changing Pads	Quantity is based on 8-10 diaper changes per infant per day.
Infant bathing basin	Thick plastic non-foldable basin at least 12 x 10 x 4 inches
Infant wash, hypoallergenic	Either bottle(s) of baby wash (minimum 100-oz.), which can be "dosed out" in a disposable cup (1/8 cup per day per child) or 1 travel size (2-oz.) bottle to last ~48 hours per child.
Wash cloths	Terry cloth/cotton – at least one per child to last the 72-hour period.
Infant hat and booties	Issued by medical/health authority in shelter.
Lightweight Blankets	<p>Should be hypoallergenic, (e.g., cotton, cotton flannel, or polyester fleece).</p> <p>Lightweight to avoid suffocation risk.</p>
Folding, portable cribs or playpens	To provide safe sleeping environments for infants up to 12 months of age.
Toddler potty seat	Seat that can be placed on the seat of an adult toilet with handles for support. One each should be located in both a Men's and Women's restroom.
Electrical Receptacle Covers	Prioritize covering outlets in areas where children and families congregate (family sleeping area, children's areas, etc.)
For the following items: infant bathing basin, lightweight blankets, diaper rash ointment, wash cloths, and towels	Consider pre-packaging the listed items together and providing one package to each family with children. Note: additional blankets and towels will be necessary for families with more than one child.

REDACTED

Table D8 Pediatric Meal Needs by County per Day

County	Total Census (0-4 years)	Baby Food Stage 1 2.5-oz (jars)	Baby Food Stage 2 3.5-4 oz (jars)	Baby Food Stage 3 6-oz (jars)	Healthy Snacks (cans/ small cartons)	Cereal Single Grain (16-oz. box)	Formula Milk-Based Pre-mixed (oz.)	Formula Hydrolyzed Protein Pre-mixed (oz.)	Formula Soy-Based, Pre-mixed (oz.)	Oral Electrolyte Solution (Pedialyte) (quart)	Nutritional Supplement Drinks (Pediasure) (8-oz bottles)	Total Pallets	Total Truck loads
Bollinger	750	3,000	3,000	3,000	1,200	75	24,000	4,800	4,800	75	1,125	23.83	1.08
Butler	2,931	11,724	11,724	11,724	4,690	293	93,792	18,758	18,758	293	4,397	93.15	4.23
Cape Girardeau	4,760	19,040	19,040	19,040	7,616	476	152,320	30,464	30,464	476	7,140	151.27	6.88
Carter	397	1,588	1,588	1,588	635	40	12,704	2,541	2,541	40	596	12.62	0.57
Dunklin	2,309	9,236	9,236	9,236	3,694	231	73,888	14,778	14,778	231	3,464	73.38	3.34
Iron	652	2,608	2,608	2,608	1,043	65	20,864	4,173	4,173	65	978	20.72	0.94
Jefferson	14,986	59,944	59,944	59,944	23,978	1,499	479,552	95,910	95,910	1,499	22,479	476.25	21.65
Madison	781	3,124	3,124	3,124	1,250	78	24,992	4,998	4,998	78	1,172	24.82	1.13
Mississippi	888	3,552	3,552	3,552	1,421	89	28,416	5,683	5,683	89	1,332	28.22	1.28
New Madrid	1,249	4,996	4,996	4,996	1,998	125	39,968	7,994	7,994	125	1,874	39.69	1.80
Oregon	597	2,388	2,388	2,388	955	60	19,104	3,821	3,821	60	896	18.97	0.86
Pemiscot	1,502	6,008	6,008	6,008	2,403	150	48,064	9,613	9,613	150	2,253	47.73	2.17
Perry	1,277	5,108	5,108	5,108	2,043	128	40,864	8,173	8,173	128	1,916	40.58	1.84
Reynolds	321	1,284	1,284	1,284	514	32	10,272	2,054	2,054	32	482	10.20	0.46
Ripley	855	3,420	3,420	3,420	1,368	86	27,360	5,472	5,472	86	1,283	27.17	1.24
St. Charles	24,308	97,232	97,232	97,232	38,893	2,431	777,856	155,571	155,571	2,431	36,462	772.50	35.11
Ste. Genevieve	961	3,844	3,844	3,844	1,538	96	30,752	6,150	6,150	96	1,442	30.54	1.39
St. Francois	4,105	16,420	16,420	16,420	6,568	411	131,360	26,272	26,272	411	6,158	130.46	5.93
St. Louis	60,712	242,848	242,848	242,848	97,139	6,071	1,942,784	388,557	388,557	6,071	91,068	1929.41	87.70
Scott	2,959	11,836	11,836	11,836	4,734	296	94,688	18,938	18,938	296	4,439	94.04	4.27
Stoddard	1,826	7,304	7,304	7,304	2,922	183	58,432	11,686	11,686	183	2,739	58.03	2.64
Wayne	696	2,784	2,784	2,784	1,114	70	22,272	4,454	4,454	70	1,044	22.12	1.01
St. Louis (City)	25,460	101,840	101,840	101,840	40,736	2,546	814,720	162,944	162,944	2,546	38,190	809.11	36.78
Total	155,282	621,128	621,128	621,128	248,451	15,528	4,969,024	993,805	993,805	15,528	232,923	4934.82	224.31

REDACTED

Table D9 Pediatric Diaper Needs by County per Day

County	Total 2009 Census (0-4 yrs)	Diaper Wipes (box, 200 ct)	Diapers Preemie Size up to 6 pounds (lbs.) (diapers)	Diapers Size 1 up to 14 lbs. (diapers)	Diapers Size 2 12-18 lbs. (diapers)	Diapers Size 3 16-28 lbs. (diapers)	Diapers Size 4 22-37 lbs. (diapers)	Diapers Size 5 27 lbs. + (diapers)	Pull Ups 4T - 5T 38 lbs. + (diapers)	Total Pallets	Total Truckloads
Bollinger	750	75	3,000	3,000	3,000	3,000	3,000	3,000	3,000	16.76	0.76
Butler	2,931	293	11,724	11,724	11,724	11,724	11,724	11,724	11,724	65.51	2.98
Cape Girardeau	4,760	476	19,040	19,040	19,040	19,040	19,040	19,040	19,040	106.39	4.84
Carter	397	40	1,588	1,588	1,588	1,588	1,588	1,588	1,588	8.87	0.40
Dunklin	2,309	231	9,236	9,236	9,236	9,236	9,236	9,236	9,236	51.61	2.35
Iron	652	65	2,608	2,608	2,608	2,608	2,608	2,608	2,608	14.57	0.66
Jefferson	14,986	1,499	59,944	59,944	59,944	59,944	59,944	59,944	59,944	334.95	15.23
Madison	781	78	3,124	3,124	3,124	3,124	3,124	3,124	3,124	17.46	0.79
Mississippi	888	89	3,552	3,552	3,552	3,552	3,552	3,552	3,552	19.85	0.90
New Madrid	1,249	125	4,996	4,996	4,996	4,996	4,996	4,996	4,996	27.92	1.27
Oregon	597	60	2,388	2,388	2,388	2,388	2,388	2,388	2,388	13.34	0.61
Pemiscot	1,502	150	6,008	6,008	6,008	6,008	6,008	6,008	6,008	33.57	1.53
Perry	1,277	128	5,108	5,108	5,108	5,108	5,108	5,108	5,108	28.54	1.30
Reynolds	321	32	1,284	1,284	1,284	1,284	1,284	1,284	1,284	7.17	0.33
Ripley	855	86	3,420	3,420	3,420	3,420	3,420	3,420	3,420	19.11	0.87
St. Charles	24,308	2,431	97,232	97,232	97,232	97,232	97,232	97,232	97,232	543.31	24.70
Ste. Genevieve	961	96	3,844	3,844	3,844	3,844	3,844	3,844	3,844	21.48	0.98
St. Francois	4,105	411	16,420	16,420	16,420	16,420	16,420	16,420	16,420	91.75	4.17
St. Louis	60,712	6,071	242,848	242,848	242,848	242,848	242,848	242,848	242,848	1356.99	61.68
Scott	2,959	296	11,836	11,836	11,836	11,836	11,836	11,836	11,836	66.14	3.01
Stoddard	1,826	183	7,304	7,304	7,304	7,304	7,304	7,304	7,304	40.81	1.86
Wayne	696	70	2,784	2,784	2,784	2,784	2,784	2,784	2,784	15.56	0.71
St. Louis (City)	25,460	2,546	101,840	101,840	101,840	101,840	101,840	101,840	101,840	569.06	25.87
Total	155,282	15,528	621,128	621,128	621,128	621,128	621,128	621,128	621,128	3470.74	157.76

REDACTED

Table D10 Pediatric Non-Perishable Garment Needs by County per Day

County	Total 2009 Census (0-4 years)	Wash Cloths	Towels	Infant Hat and Booties	Lightweight Blankets	Total Pallets	Total Truckloads
Bollinger	750	750	750	150	750	0.29	0.01
Butler	2,931	2,931	2,931	586	2,931	1.15	0.05
Cape Girardeau	4,760	4,760	4,760	952	4,760	1.86	0.08
Carter	397	397	397	79	397	0.16	0.01
Dunklin	2,309	2,309	2,309	462	2,309	0.90	0.04
Iron	652	652	652	130	652	0.26	0.01
Jefferson	14,986	14,986	14,986	2,997	14,986	5.87	0.27
Madison	781	781	781	156	781	0.31	0.01
Mississippi	888	888	888	178	888	0.35	0.02
New Madrid	1,249	1,249	1,249	250	1,249	0.49	0.02
Oregon	597	597	597	119	597	0.23	0.01
Pemiscot	1,502	1,502	1,502	300	1,502	0.59	0.03
Perry	1,277	1,277	1,277	255	1,277	0.50	0.02
Reynolds	321	321	321	64	321	0.13	0.01
Ripley	855	855	855	171	855	0.33	0.02
St. Charles	24,308	24,308	24,308	4,862	24,308	9.52	0.43
Ste. Genevieve	961	961	961	192	961	0.38	0.02
St. Francois	4,105	4,105	4,105	821	4,105	1.61	0.07
St. Louis	60,712	60,712	60,712	12,142	60,712	23.78	1.08
Scott	2,959	2,959	2,959	592	2,959	1.16	0.05
Stoddard	1,826	1,826	1,826	365	1,826	0.72	0.03
Wayne	696	696	696	139	696	0.27	0.01
St. Louis (City)	25,460	25,460	25,460	5,092	25,460	9.97	0.45
Total	155,282	155,282	155,282	31,056	155,282	60.82	2.76

REDACTED

Table D11 Pediatric Non-Perishable Non-Food Consumable Needs by County per Day

County	Total	Infant Feeding Bottles 6 oz.	Infant Feeding Spoons	Nipples for Baby Bottles	Diaper Rash Ointment (small tubes)	Disposable Changing Pads, 13 x 18 inches	Infant Wash (2-oz bottle)	Total Pallets	Total Truckloads
Bollinger	750	1,875	2,250	3,750	1,875	7,500	3,750	3.80	0.17
Butler	2,931	7,328	8,793	14,655	7,328	29,310	14,655	14.83	0.67
Cape Girardeau	4,760	11,900	14,280	23,800	11,900	47,600	23,800	24.09	1.09
Carter	397	993	1,191	1,985	993	3,970	1,985	2.01	0.09
Dunklin	2,309	5,773	6,927	11,545	5,773	23,090	11,545	11.68	0.53
Iron	652	1,630	1,956	3,260	1,630	6,520	3,260	3.30	0.15
Jefferson	14,986	37,465	44,958	74,930	37,465	149,860	74,930	75.84	3.45
Madison	781	1,953	2,343	3,905	1,953	7,810	3,905	3.95	0.18
Mississippi	888	2,220	2,664	4,440	2,220	8,880	4,440	4.49	0.20
New Madrid	1,249	3,123	3,747	6,245	3,123	12,490	6,245	6.32	0.29
Oregon	597	1,493	1,791	2,985	1,493	5,970	2,985	3.02	0.14
Pemiscot	1,502	3,755	4,506	7,510	3,755	15,020	7,510	7.60	0.35
Perry	1,277	3,193	3,831	6,385	3,193	12,770	6,385	6.46	0.29
Reynolds	321	803	963	1,605	803	3,210	1,605	1.62	0.07
Ripley	855	2,138	2,565	4,275	2,138	8,550	4,275	4.33	0.20
St. Charles	24,308	60,770	72,924	121,540	60,770	243,080	121,540	123.01	5.59
Ste. Genevieve	961	2,403	2,883	4,805	2,403	9,610	4,805	4.86	0.22
St. Francois	4,105	10,263	12,315	20,525	10,263	41,050	20,525	20.77	0.94
St. Louis	60,712	151,780	182,136	303,560	151,780	607,120	303,560	307.24	13.97
Scott	2,959	7,398	8,877	14,795	7,398	29,590	14,795	14.97	0.68
Stoddard	1,826	4,565	5,478	9,130	4,565	18,260	9,130	9.24	0.42
Wayne	696	1,740	2,088	3,480	1,740	6,960	3,480	3.52	0.16
St. Louis (City)	25,460	63,650	76,380	127,300	63,650	254,600	127,300	128.84	5.86
Total	155,282	388,205	465,846	776,410	388,205	1,552,820	776,410	785.81	35.72

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Table D12 Pediatric Non-Perishable Non-Consumable Needs by County per Day

County	Total	Infant Bathing Basins, 12 x 10 x 4 inches	Folding/ Portable Cribs or Playpens	Toddler Potty Seat	Electrical Receptacle Covers (pack of 30)	Sip Cups for Toddlers	Total Pallets	Total Truckloads
Bollinger	750	750	375	150	75	750	2.74	0.12
Butler	2,931	2,931	1,466	586	293	2,931	10.71	0.49
Cape Girardeau	4,760	4,760	2,380	952	476	4,760	17.39	0.79
Carter	397	397	199	79	40	397	1.45	0.07
Dunklin	2,309	2,309	1,155	462	231	2,309	8.43	0.38
Iron	652	652	326	130	65	652	2.38	0.11
Jefferson	14,986	14,986	7,493	2,997	1,499	14,986	54.74	2.49
Madison	781	781	391	156	78	781	2.85	0.13
Mississippi	888	888	444	178	89	888	3.24	0.15
New Madrid	1,249	1,249	625	250	125	1,249	4.56	0.21
Oregon	597	597	299	119	60	597	2.18	0.10
Pemiscot	1,502	1,502	751	300	150	1,502	5.49	0.25
Perry	1,277	1,277	639	255	128	1,277	4.66	0.21
Reynolds	321	321	161	64	32	321	1.17	0.05
Ripley	855	855	428	171	86	855	3.12	0.14
St. Charles	24,308	24,308	12,154	4,862	2,431	24,308	88.79	4.04
Ste. Genevieve	961	961	481	192	96	961	3.51	0.16
St. Francois	4,105	4,105	2,053	821	411	4,105	14.99	0.68
St. Louis	60,712	60,712	30,356	12,142	6,071	60,712	221.77	10.08
Scott	2,959	2,959	1,480	592	296	2,959	10.81	0.49
Stoddard	1,826	1,826	913	365	183	1,826	6.67	0.30
Wayne	696	696	348	139	70	696	2.54	0.12
St. Louis (City)	25,460	25,460	12,730	5,092	2,546	25,460	93.00	4.23
Total	155,282	155,282	77,641	31,056	15,528	155,282	567.21	25.78

REDACTED

Table D13 Pediatric Resources Summary of Pallets and Truckloads

County	Non-Perishables											
	Pediatric Meals		Diapers		Garments		Non-Food Consumables		Non-Consumables		Total	
	Total Pallets	Total Truck-loads	Total Pallets	Total Truck-loads	Total Pallets	Total Truck-loads	Total Pallets	Total Truck-loads	Total Pallets	Total Truck-loads	Total Pallets	Total Truck-loads
Bollinger	23.83	1.08	16.76	0.76	0.29	0.01	3.8	0.17	2.74	0.12	47.42	2.14
Butler	93.15	4.23	65.51	2.98	1.15	0.05	14.83	0.67	10.71	0.49	185.35	8.42
Cape Girardeau	151.27	6.88	106.39	4.84	1.86	0.08	24.09	1.09	17.39	0.79	301	13.68
Carter	12.62	0.57	8.87	0.4	0.16	0.01	2.01	0.09	1.45	0.07	25.11	1.14
Dunklin	73.38	3.34	51.61	2.35	0.9	0.04	11.68	0.53	8.43	0.38	146	6.64
Iron	20.72	0.94	14.57	0.66	0.26	0.01	3.3	0.15	2.38	0.11	41.23	1.87
Jefferson	476.25	21.65	334.95	15.23	5.87	0.27	75.84	3.45	54.74	2.49	947.65	43.09
Madison	24.82	1.13	17.46	0.79	0.31	0.01	3.95	0.18	2.85	0.13	49.39	2.24
Mississippi	28.22	1.28	19.85	0.9	0.35	0.02	4.49	0.2	3.24	0.15	56.15	2.55
New Madrid	39.69	1.8	27.92	1.27	0.49	0.02	6.32	0.29	4.56	0.21	78.98	3.59
Oregon	18.97	0.86	13.34	0.61	0.23	0.01	3.02	0.14	2.18	0.1	37.74	1.72
Pemiscot	47.73	2.17	33.57	1.53	0.59	0.03	7.6	0.35	5.49	0.25	94.98	4.33
Perry	40.58	1.84	28.54	1.3	0.5	0.02	6.46	0.29	4.66	0.21	80.74	3.66
Reynolds	10.2	0.46	7.17	0.33	0.13	0.01	1.62	0.07	1.17	0.05	20.29	0.92
Ripley	27.17	1.24	19.11	0.87	0.33	0.02	4.33	0.2	3.12	0.14	54.06	2.47
St. Charles	772.5	35.11	543.31	24.7	9.52	0.43	123.01	5.59	88.79	4.04	1537.13	69.87
Ste. Genevieve	30.54	1.39	21.48	0.98	0.38	0.02	4.86	0.22	3.51	0.16	60.77	2.77
St. Francois	130.46	5.93	91.75	4.17	1.61	0.07	20.77	0.94	14.99	0.68	259.58	11.79
St. Louis	1929.41	87.7	1356.99	61.68	23.78	1.08	307.24	13.97	221.77	10.08	3839.19	174.51
Scott	94.04	4.27	66.14	3.01	1.16	0.05	14.97	0.68	10.81	0.49	187.12	8.5
Stoddard	58.03	2.64	40.81	1.86	0.72	0.03	9.24	0.42	6.67	0.3	115.47	5.25
Wayne	22.12	1.01	15.56	0.71	0.27	0.01	3.52	0.16	2.54	0.12	44.01	2.01
St. Louis (City)	809.11	36.78	569.06	25.87	9.97	0.45	128.84	5.86	93	4.23	1609.98	73.19
Total	4934.82	224.31	3470.74	157.76	60.82	2.76	785.81	35.72	567.21	25.78	9819.4	446.33

1.1 Purpose

The purpose of this Annex is to provide ESF-7 specific information for the OPLAN. The ESF-7 Logistics Management and Resource Support Annex details limitations, organization, and courses of action to execute roles and responsibilities assigned to the ESF during a NMSZ incident. This OPLAN Annex identifies gaps and seams, enhances unity of effort, and links existing plans. Specifically, this Annex presents an integrated resource and logistics plan among FEMA Region VII and Federal ESF-7 partners, the Missouri State Emergency Management Agency (SEMA), other critical state agencies, and local responders throughout Missouri. This Annex provides an overview of supporting activities and how the State of Missouri and FEMA and its partners will perform ESF-7 Resource and Logistics missions in support of the citizens of Missouri under the National Response Framework (NRF), the Missouri State Emergency Operations Plan (SEOP), and this OPLAN.

1.2 Objective

This Annex is devised to support the following objective as defined by the Region VII Senior Leadership Steering Committee (SLSC) and the ESF-7 Integrated Working Group (IWG):

Objective: Obtain, deliver, and track resources to establish and maintain response operations

This annex:

- Identifies components of the disaster logistics delivery structure for a no-notice incident
- Provides a concept of operations for ESF-7 in support of the NRF and the 2010 Region VII NMSZ OPLAN
- Outlines support responsibilities and changes as various ESFs become activated during a major earthquake disaster.

1.3 Assumptions

The assumptions below include damage assumptions based largely on MAE Center data as well as planning assumptions defined by state and federal stakeholders.

1.3.1 Damage Assumptions

Geographical Impact

According to MAE Center data, nearly 123,719 households are projected to be without water service, and 302,173 are projected to be without electric power. Significant ESF-7 support for commodities distribution and fuel will be necessary.

Transportation Infrastructure

Air, highway, water, and rail transportation routes across the impacted area will be severely damaged by the New Madrid earthquake, particularly in southeast Missouri. Damage to highways and interstates due to the earthquake will also impede use of roads for evacuating residents or moving supplies. Nearly all bridges located in Dunklin, Pemiscot, New Madrid, Mississippi, Scott, and Stoddard Counties will be damaged to some degree. Such damage will impede land-based ESF-7 support.

Structural Damage

Damage to infrastructure will generate substantial amounts of debris, especially in southeast Missouri. MAE Center data indicate a total of 6.5 million tons of debris generated as a result of the New Madrid earthquake, requiring over 52,000 truckloads to remove debris.

Nearly 100 electric power facilities will be damaged, with most damage occurring in Butler, Cape Girardeau, Dunklin, Mississippi, New Madrid, Pemiscot, Scott, and Stoddard Counties. Damage to the electric grid will leave tens of thousands of households without power immediately after the earthquake. Upwards of 80% of households in the impact area are projected to be without power, as well as a substantial number of critical facilities in eastern Missouri.

Communication capabilities will be severely reduced in the most heavily impacted portions of Missouri. While the damage is difficult to quantify, a scarcity of communication lines expected after the earthquake will cause congestion and significant strain on the remaining infrastructure, which may fail under the weight of increased traffic.

Public Order

Incidents such as Hurricane Katrina indicate a potential for a breakdown in public order. Mass looting and rioting could break out as local governments are unable to support public safety operations. Such potential chaos may affect all response operations, including ESF-7, and pose need for robust security support for logistics operations.

1.3.2 Federal Planning Assumptions

- As a no-notice incident, the General Services Administration (GSA) and FEMA will not receive adequate warning for a NMSZ incident.
- A NMSZ incident will impact more than one federal region concurrently.
- GSA will be asked to provide resource support outside the specified planning considerations of ESF-7.
- GSA Headquarters and Staff Offices will be engaged in direct support of the regional response and recovery operations.
- In addition to regional response, GSA regions not impacted will be required to deploy personnel and resources to impacted areas.
- FEMA will activate the NRF and ESFs.
- Human needs will be a high priority, with an overwhelming number of deaths and injuries as a result of the incident.
- An abundance of secondary problems will result due to damage brought about by the earthquake.
- Local and state government capabilities will be quickly overwhelmed.
- Local jurisdictions will be expected to be self-sustaining for the initial 96 hours after the incident.
- FEMA will utilize pre-existing contracts for logistical needs such as Base Camps, bottled water, meals, ambulances, fuel, and other critical resources. In addition to existing contracts, FEMA Acquisitions and other sources such as the Defense Logistics Agency (DLA) will be used to support logistics and resource needs. FEMA will also submit logistical resource requests through

GSA both at the National Response Coordination Center (NRCC) and the Regional Response Coordination Center (RRCC).

- FEMA will utilize GSA to procure appropriate land for logistical staging areas.
- FEMA will use multiple staging areas for ISBs. **REDACTED** and will use the GSA to acquire use of non-Department of Defense (DOD) assets (civilian airports, etc.) for use as ISBs.
- Due to the nature of the damage, the National Command Authority will bring in substantial DOD assets.
- The exact nature of the damage is hard to accurately predict. GSA can expect frequent changes.
- FEMA will order what will amount to thousands of tons of supplies.
- GSA will also have to start work to rebuild what might be hundreds of federal buildings owned and leased in affected areas.
- FEMA may task GSA to move supplies directly to the impact zone and forego staging areas.
- Significant pressure will be exerted for resumption of federal operations in the impact zone. Thus, GSA must move quickly to support agency reconstitution after the earthquake, and GSA may be required to house agencies in temporary spaces while permanent space is acquired.
- The extent of the damage will adversely affect private vendors in the area and will impact competition. Thus, prices are expected to skyrocket due to profiteering, shortages, and lack of competition.

1.3.3 State Planning Assumptions

- The Governor of Missouri will quickly request federal assistance after the earthquake.
- Federal ESF-7 support will be provided to support operations through requests by the State of Missouri. However, for a catastrophic earthquake incident, Federal ESF-7 support and assets will likely be requested by the State in the form of federal technical assistance and response support if assets and capabilities of affected local communities and the State are overwhelmed as expected.
- During disaster operations, execution of most logistics and resource management actions beyond state capabilities will be coordinated through FEMA RVII ESF-7 Resources Management and other federal operations including the Defense Coordinating Element.
- FEMA RVII's Logistics Management capabilities will be established prior to ESF activation to ensure that logistics activities are rapidly initiated and initial logistics services are provided until ESFs are set up to begin operations. FEMA RVII's logistics actions will complement ESF operations by preparing and deploying FEMA-stored assets and handling the disposition of commodities at the end of the operation.
- FEMA actions will be closely coordinated with the Missouri State Emergency Management Agency (SEMA).
- All ESF partners will respond to the incident.
- The earthquake will yield an overwhelming number of injured and homeless people in need of care, treatment, shelter, and feeding.
- The earthquake will yield an overwhelming number of fatalities requiring identification and processing.

- An abundance of secondary problems will result due to damage brought about by the earthquake and subsequent aftershocks which will adversely impact response capabilities.
- Local government structure and capabilities will be overwhelmed but will remain operational to the extent they remain intact.
- Damage may be so severe in some places that local jurisdictions and citizens may not be able to be self-sustaining for the initial 96 hours after the incident.
- GSA will be expected to assist in procuring and managing the ESF-7 functional needs for the incident.
- **REDACTED.**
- Due to the nature of the damage, the National Command Authority will bring in substantial DOD and other federal assets in coordination with SEMA and FEMA.
- The Governor will activate the entire Missouri National Guard (MONG).
- Incidents of this scale are hard to predict. All entities can expect frequent changes to plans.
- Response organizations at all levels will need to deploy/employ thousands of tons of supplies.
- A significant number of people will leave the impact zone, either via self-evacuation or with the support of local, state, and federal authorities. Estimates of the evacuation flow amount to 25% of the population within the impact zone. A certain percentage of those evacuees will have injuries and require care outside the impact zone. Without close coordination, evacuation operations may adversely affect transportation and other support operations.
- Existing local, county, state, and federal government buildings may be significantly damaged and non-functional after the incident.
- Strong political and public pressure for expedited operational response will be exerted.
- The extent of the damage will adversely affect private vendors in the area and will reduce competition. Prices may escalate significantly until the situation stabilizes.
- Deployment of supplies to the impact zone will be adversely effected by the damaged transportation network.
- Space to support response operations will be limited in Southeast Missouri.
- Security will be a concern at all sites.

1.4 Limitations

Cascading damages caused by the collapse of water, sewer, pipelines, natural gas, and other critical infrastructure and key resources (CI/KR) will reduce local capabilities and may cause fires, hazardous material (HAZMAT) spills, loss of utilities, and other incidents which further complicate the situation. The area can expect significant aftershocks in terms of number and severity for months following the initial earthquake and is also susceptible to multiple larger quakes. Those aftershocks could further damage the area's infrastructure. Such damage will affect delivery of supplies and services and presents the following limiting factors to logistics and resource support operations:

- Physical injuries and psychological distress will occur in both highly populated and isolated areas within Missouri. Physical injuries will create a surge in medical services needed and will require

dramatic responses efforts from emergency responders. There will be a surge of existing and new occurrences of psychological concerns which will strain medical resources at shelters and hospitals. Individuals with physical injuries and psychological distress will also require ad hoc pharmaceutical services.

- Impacted Federal Regions may be operating in a Continuity of Operations environment which could lead to degraded ability to fulfill ESF-7 responsibilities.
- Missouri has limited capacity to store and process human remains, including both fatalities resulting from the incident and unearthed corpses at cemeteries. Post mortem processing of human remains will require cultural sensitivity, respectful care, and resource augmentation.
- Approximately 842,002 people in Missouri are expected to be displaced from their homes by day 3 following a catastrophic NMSZ earthquake. According to MAE Center data, over 25% of the population within the most impacted regions of Missouri are considered to have access and functional needs. A large access and functional needs and elderly population within the State will require specialized support following a catastrophic earthquake. Others with chronic medical conditions will require acute and chronic medical attention at shelters and hospitals. Congregate care shelters must be Americans with Disabilities Act-compliant, and are expected to have a level of specialized equipment available. However, resources will be insufficient to provide such equipment to many locations at once. Shelter management must recognize the need to keep people with disabilities and their mobility devices, service animals, accompanied caregivers, and/or other durable medical equipment together. Shelters must also develop a plan for transferring/transporting patients to appropriate medical locations, if required.
- Resumption of standard food distribution operations will depend on the degree of damage to infrastructure and speed of repairs. Debris clearance will be required to distribute food. Emergency food supplies, in the form of pre-packaged meals, will be distributed through commodity PODs, which will be established and operated at the direction of local emergency management agencies and/or SEMA.
- According to MAE Center data, approximately 121,191 pets will require sheltering. The State of Missouri estimates that nearly 350,000 pets from Missouri Regions C and E may require sheltering². Pet care must be factored within the mass care for the population. Human and pet shelters will be co-located, and pet shelter spaces cannot displace congregate care shelter space. Service animals are not considered pets and will be sheltered with owners. Emotional support or comfort animals are not recognized under Americans with Disabilities Act of 1990.
- Water system integrity is essential for firefighting, sanitation, decontamination, and life sustainment. Destruction of these systems will limit the availability of water to support these activities. Re-establishing and maintaining the water supply will require generators and refueling capabilities to key sites.
- According to MAE Center data, approximately 87,000 buildings will incur damage during a NMSZ earthquake, with 44,000 of them completely destroyed. Buildings and infrastructure impacted will include hospitals, fire stations, police stations, schools, bridges, airports, railroad facilities, dams, levees, and HAZMAT facilities. Pipelines supplying natural gas and fuel, electrical distribution systems and lines, and communications infrastructure are expected to be heavily damaged and largely inoperable immediately following an incident.

² This is estimate is based on sheltering 25% of the pets within the 22 impacted counties with total estimated population of 1.2 million.

- To support critical air and land-based operations, fuel is a critical resource to ensure that lifesaving operations can be commenced and sustained. Critical facilities (e.g., hospitals and emergency medical facilities, water wells, waste water treatment, command and control nodes, staging areas, shelters, responder vehicles, and fuel distribution nodes) will depend on temporary emergency power for prolonged periods of time. This will require regular fuel deliveries and staging of temporary storage capacity at select sites.
- While some Search and Rescue (S&R) teams are self-sufficient, some logistical and resource support of S&R teams is expected. In addition, logistics and resource support for medical treatment and transport of patients will be required. Hospital patients and those in congregate care facilities may also require evacuation.
- Damage to communications infrastructure across the impacted zone will adversely impact situational awareness. Logistics and resource support will be required to ensure timely restoration of communications and power infrastructures.
- A NMSZ incident will significantly compromise transportation routes and bridges. Collaborative efforts including resource and logistics will be required to ensure timely clearance of critical transportation routes.
- Projections indicate significant gaps in human resources and other assets to support logistics management and resource support.
- Space and locations to support response operations will be lacking in certain areas of Missouri and will require review under Disaster Terrain Management.
- The volume of work and stresses in the environment will tax logistics management and resource support operations.

1.5 Port Facilities Overview

Most ports along the Mississippi River in southern Missouri will be significantly damaged and unable to operate at full capacity. This includes port facilities in Pemiscot, New Madrid, Mississippi, Scott, and Cape Girardeau Counties.

Port facilities in Missouri are not typically used to support response infrastructure. Thus, port damage will have little impact on logistics and resource operations but are a significant consideration during Phase 3, Long-Term Recovery.

1.6 Air Transportation Overview

According to the MAE Center, airports in Dunklin, Pemiscot, New Madrid, Butler, Mississippi, Scott, and Stoddard Counties will undergo severe damage and will most likely be closed, leaving those counties without operational facilities. Nearly 30 airports throughout Southeast Missouri will not be operational the day after the incident, some of which will be damaged severely, thus limiting access to the boot-heel of Missouri via air transport.

A lack of available airports to support fixed-wing operations dictates significant use of rotary wing aircraft. The logistics and resource support provisions set forth herein are based on the need to support significant rotary wing operations.

1.7 Ground Transportation Overview

According to the MAE Center, damage to highways, interstates, and bridges due to the earthquake will impede evacuation of residents and movement of resources to support response operations. Dunklin, Pemiscot, New Madrid, Butler, Stoddard, and Scott Counties will undergo most of the bridge damage. Approximately 1,360 bridges are expected to incur at least moderate damage throughout Southeast Missouri.

2.0 Mission

The mission of the joint state/federal response organization is to save and sustain human life, minimize suffering, stabilize and restore CI/KR, and set the conditions for recovery following a catastrophic earthquake in the State of Missouri. The mission of ESF-7 primary and support agencies is to provide expedited resource support to lifesaving and life sustaining efforts.

During the disaster response and recovery, government at all levels has responsibility to mobilize all available resources to protect lives and property and relieve suffering. The first priority of all response agencies is the direct preservation of life. This covers both goods and services related to immediate response. A second mission is to provide support to the affected areas in order to preserve and sustain life.

Initial priority of support will be for:

1. First responder operations such as fire suppression, law enforcement, ambulance, air ambulance, triage and life essential medical, and S&R.
2. Re-establishment and functioning of essential local government services and the Incident Management Team to coordinate first responders and critical community support.
3. Establishment of preliminary staging areas and base camps in predetermined locations to provide initial operations and logistics support. Additional or replacement staging areas and base camps will be established as the situation unfolds, circumstances allow, and resources become available.
4. Establishment and provision of life-essential, critical supplies such as water, food and medicines, and other mass care requirements such as sheltering, sanitation, (heating and/or cooling/ice as necessary and possible).
5. Establishment and provision of essential transportation assets to move to shelter or evacuate outside the disaster area to shelter those with access and functional needs, medical populations, lost children, and/or populations otherwise without their own transportation.
6. Emergency repairs of essential public works and services.

When activated by FEMA, GSA as the primary agency for the Resource Support (supplies, space and services) component of ESF-7, will provide contracting, regional telecommunications, facilities, land, supplies, transportation, and personnel (technical advisors) necessary to support the Federal Response and Recovery operations of the NMSZ incident.

The State of Missouri and the Federal Government will move rapidly to provide lifesaving and sustaining resources and to restore critical services to areas in need. If required and where practical, federal resources will be staged in Missouri. As soon as feasible, SEMA and FEMA will form a joint State/Federal Unified Coordination Group (UCG).

3.0 Execution

The State of Missouri and Region VII response phase methodology has been designed to meet the first 5 days (120 hours) of operations. The current methodology involves phases of operation. **Table D14** shows the (sub)phases of Phase 2:

Table D14 Response Phase Operational Periods

Response Phase	Operational Period
2a – Activation/Immediate Response	Event (E) + 24 hrs
2b – Deployment	E + 24 – E + 72 hrs
2c – Sustained Response	E + 72 – E + 120 hours +

The Response Phase and Operational Periods are designed to be flexible, as the complexity of the incident will determine the actual phases/periods.

3.1 Phase 2a Activation/Immediate Response

Purpose of Phase

Three primary purposes of this phase are:

1. Notify and activate all response organizations based on pre-determined automatic activation thresholds.
2. Establish systemic lines of communication among local, state, and federal response agencies to develop a common operating picture (COP) and to maintain situational awareness.
3. Establish the UCG to facilitate effective and expedited response operations.

Achieving these goals will provide information to define incident-specific resource and logistics priorities and to set an initial course for deployment of assets.

End State of Phase

The desired end state of this phase is full development of a command and control structure to allow deployment of resources and response assets. The earthquake will result in immediate activation of local and state command and coordinating facilities and an established UCG.

Local Mission-essential Tasks

Local Emergency Management Agencies

1. Deploy staff to their Local Emergency Operations Centers (LEOC) and implement command and control measures, as able.
2. Activate available staff to assess conditions, make initial damage estimates, and identify resource needs.
3. Establish communications with the Missouri State Emergency Operations Center (SEOC) by any means available.

All Local Government Agencies

All local agencies will provide resources and expertise as available to support disaster logistics management and resource management operations.

State Mission-essential Tasks

State Emergency Management Agency

1. Activate the SEOC and summon all ESF representatives to support response operations.
2. Activate the State Area Coordination Centers (SACC) if necessary.
3. Activate and operate State Staging Areas.
4. Coordinate activation of Base Camps and PODs.
5. Notify business partners that the Business Emergency Operations Center (BEOC) may be activated.
6. Provide staffing to the Joint Field Office (JFO) as required.
7. Monitor situational reports (SITREP); estimate resource needs, particularly for local areas heavily impacted; and supply all available resources based on priorities established by the Principal State Official (PSO).

Federal Mission-essential Tasks

Federal Emergency Management Agency Headquarters Logistics Management Directorate

1. Establish, maintain, and execute agency-wide logistics plans, policies, procedures, doctrines, standards, and governance.
2. Develop and maintain national logistics support requirements, capabilities, and visibility of resources.
3. Provide agency-wide funding, budget, and resource management for logistics.
4. Provide FEMA Headquarters and Region VII logistics with functional command, coordination, and oversight of all logistics activities (including national resource management at the JFOs and Distribution Centers).
5. Coordinate the agency logistics response through the FEMA Headquarters Logistics Operations Center.
6. Provide agency-wide logistics information management and communications capabilities.

General Services Administration (GSA)

1. Locate, procure, and issue resources to other federal agencies for use in emergency operations necessary to support the federal emergency response or to promote public safety.
2. Coordinate transfer of excess federal personal property and assist in its disposal when requested.
3. Locate and coordinate use of available space for incident management activities.
4. Coordinate and determine availability and provision of consumable non-edible supplies stocked in Distribution Centers and customer supply centers when available.
5. Procure required stocks from vendors or suppliers when GSA items are not available.
6. Coordinate procurement of communications equipment and services in accordance with the Office of Science and Technology Policy National Plan for Telecommunications Support in Non-Wartime Emergencies.
7. Provide support to the GSA Regional Administrator for all Resource Support activities.

3.2 Phase 2b Deployment

Purpose of Phase

The purpose of this phase is to deploy necessary assets to sustain systematic response operations scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is a defined and systematic response operation characterized by a consistent staffing plan, an established resource request and processing system, and establishment of the hub and spoke resource distribution concept. Consistent staffing, resourcing, and distribution channels allow efficient and effective processing of response needs at a defined pace.

Local Mission-essential Tasks

Local Emergency Management Agencies

1. In consultation with SEMA, continue to assess resource needs, submit resource requests, and support, to the extent possible, receipt of assets for various lifesaving and life sustaining response operations.
2. In consultation with SEMA, assist in determining how to fulfill health, medical, and mass care needs within the jurisdictions.
3. Open and staff PODs, and receive and distribute resources as able.
4. Coordinate with other local agencies, hospitals, and non-governmental organizations (NGO) to establish designated medical treatment stations and temporary shelters within the impact zone.

Local Hospitals and Emergency Medical Services (EMS)

1. If operational, support treatment of patients as able and request resources through the LEOC and/or SEOC as needed to sustain operations.
2. Support transport and treatment of patients as able, and request resources through the LEOC and/or SEOC as needed to sustain operations.
3. Provide ground transportation of patients to operational hospitals in the impact zone, and transport medical evacuees to Evacuation Assembly Sites (EAS) as needed.

State Mission-essential Tasks

State Emergency Management Agency

1. Support and execute the Emergency Management Assistance Compact (EMAC) with other states to provide mutual assistance for required logistics resources.
2. Coordinate allocation of resources with other State Departments through the SEOC Logistics Section and SEOC Logistics Team
3. SEOC Logistics & Resources Branch Chief coordinates with the Operations Section to ensure Logistics/Resources operations are conducted according to the intent and direction of the Operations Section Chief.
4. SEOC Logistics and Resources Branch Chief supervise and coordinate the activities of the Logistics Section Chief and the Resources Section Chief.

5. Following a Presidential Declaration, after state capabilities are exhausted, support requests for federal assistance for disaster aid and submit Action Request Forms (ARF).
6. Deploy personnel to establish the SACCs if activated.
7. Execute contingency contracts.
8. Continue to submit EMAC and ARF requests as needed.
9. Establish the Logistics Section in the SEOC.
10. Activate the BEOC if necessary.

Missouri Office of Administration

Serve as the primary support agency for human resources, equipment, facilities, contracting expertise, and warehousing.

All other state departments, agencies, and offices

Provide resources and expertise as needed to support disaster logistics management and resource management operations.

Federal Mission-essential Tasks

Federal Emergency Management Agency Region VII

1. Provide material management that includes determining requirements, sourcing, ordering and replenishment, storage, and issuing of supplies and equipment. This includes network, computer, and communications equipment required to support the JFO and other field operations.
2. Provide transportation management that includes equipment and procedures for moving material from storage facilities and vendors to incident victims, particularly with emphasis on the surge and sustainment portions of response. Transportation management also includes providing services to requests from other federal organizations.
3. Provide facilities management that includes the location, selection, and acquisition of storage and distribution facilities. These facilities include ISBs and Logistics Staging Areas (LSAs). Logistics is responsible for establishing and operating facilities, as well as managing related services to shelter and supporting incident responders in JFOs and other field-related operations including Base Camps.
4. Provide personal property management and policy and procedures guidance for maintaining accountability of materials and identification and reutilization of property acquired to support a federal response operation.
5. Provide management of Electronic Data Interchange to provide end-to-end visibility of response resources.
6. Provide coordination with internal and external customers and other supply chain partners in the federal and private sectors.
7. Staff JFO(s), FSAs, and ISBs, and coordinate the agency logistics response among field units.
8. Provide regional funding and resource management.
9. Provide accountability for FEMA property and equipment assigned to Region VII.
10. Execute Interagency Agreements (IAA) with other federal agencies and NGOs, and procure support from local sources.

Federal Emergency Management Agency Field Units

1. Execute Field Unit logistics plans, policies, and procedures.
2. Execute field logistics funding, budget, and resource management.
3. Execute IAAs and Memorandums of Understanding (MOU) with other federal agencies and NGOs at the field level.
4. Execute field logistics contracts with the private sector.
5. Coordinate agency logistics response at field units.
6. Coordinate field operations work with SEMA for terrain management, movement control, and security needs.

3.3 Phase 2c Employment/Sustained Response

Purpose of Phase

The purpose of this phase is to develop sustained response operations through defined operational periods, scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is indicated by sustainable operational periods characterized by defined resource needs and a steady state of response support through consistent staffing, a sustained resource request and processing system, and a sustained hub and spoke distribution channel.

Local Mission-essential Tasks

1. Local officials, as able, will continue to deploy staff to the field and to their LEOCs to continuously survey their communities in order to determine the issues that need to be addressed.
2. Local officials, via their respective LEOC, will continue to submit resource requests to the SEOC.
3. Provide local response personnel.
4. Manage response operations within the jurisdictions.

State Mission-essential Tasks

State Emergency Management Agency

1. Continue to support and execute resource requests and EMAC requests for all ESFs.
2. Continue to coordinate allocation of resources with other State Departments through the SEOC Logistics Section and SEOC Logistics Team based on the guidance of the Operations section and the PSO.
3. SEOC Logistics & Resources Branch Chief will continue to coordinate with the Operations Section to ensure Logistics/Resources operations are conducted according to the intent and direction of the Operations Section Chief.
4. SEOC Logistics and Resources Branch Chief will continue to supervise and coordinate the activities of the Logistics Section Chief and the Resources Section Chief.
5. Continue to support requests for federal assistance for disaster aid.
6. Operate the SACCs if activated.

7. Identify new sources for resources and obtain resources as needed.
8. Manage logistics and resources in the impacted area within the State of Missouri.
9. Activate and operate Staging Areas, Base Camps, and PODs.

Federal Mission-essential Tasks

Federal Emergency Management Agency Region VII

1. Provide material management including sourcing, ordering and replenishment, storage, and issuance of supplies and equipment.
2. Provide transportation management that includes equipment and procedures for moving materials from storage facilities and vendors to incident victims, particularly with emphasis on the surge and sustainment portions of response.
3. Provide facilities management that includes the location, selection, and acquisition of storage and distribution facilities.
4. Provide personal property management and policy and procedures.
5. Provide management of Electronic Data Interchange to provide end-to-end visibility of response resources.
6. Provide coordination with internal and external customers and other supply chain partners in the federal and private sectors.
7. Staff JFOs, FSAs, and ISBs, and coordinate the agency logistics response among field units.
8. Provide regional funding and resource management.
9. Provide accountability for FEMA property and equipment assigned to Region VII.

Federal Emergency Management Agency Field Units

1. Execute Field Unit logistics plans, policies, and procedures.
2. Execute field logistics funding, budget, and resource management.
3. Execute IAAs and MOUs with other federal agencies and NGOs at the field level.
4. Execute field logistics contracts with the private sector.
5. Coordinate agency logistics response at field units.
6. Coordinate with SEMA for operations within Missouri.

U.S. Department of Commerce

Through the Interagency Committee on Seismic Safety in Construction/Building and Fire Research Laboratory of the National Institute of Standards and Technology, provide technical expertise on structural surveys, as well as procurement of external consulting services. This procedure is necessary to assess the structural and fire safety of federal and non-federal damaged buildings and lifelines (e.g., public works and utilities).

U.S. Department of Energy (DOE)

In accordance with ESF-12, coordinate with energy industries to assist in satisfying critical fuel, lubricant, and electrical power needs unable to be met by local, tribal, state, or federal resources or actions.

U.S. Department of Homeland Security (DHS)

1. Act as liaison to provide logistical support to federal, state, tribal, and local governments.
2. Provide Contracting Officer's Technical Representatives from the RRCC, IMAT, or NRCC Logistics or Operations Section for all ESF-7-executed procurement contracts, as appropriate.
3. Provide an Accountable Property Officer to ensure compliance with property management regulations, and assume responsibility for federal property management associated with IMAT missions and general operations.
4. Through the National Cyber Security Division/National Communications System and in accordance with ESF-2 – Communications, assist in coordinating provision of commercial telecommunications assets within the incident area as appropriate.

U.S. Department of Labor

Provide technical personnel to assist in the identification and recruitment of individuals with specialized occupations needed to support response operations.

U.S. Department of Transportation (DOT)

Provide information about the status of the transportation infrastructure.

U.S. Department of Veterans Affairs

1. Provide technical assistance to identify and procure medical supplies and other medical services.
2. Provide personnel knowledgeable in federal procurement and distribution operations.
3. Provide computer support operations as appropriate.

National Aeronautics and Space Administration (NASA)

Provide available space, buildings, airports, and telecommunications as may be required for emergency support operations.

Office of Personnel Management

Identify, locate, and, if necessary, recruit personnel needed to support incident operations after appropriate coordination with GSA.

4.0 Roles and Responsibilities

4.1 Coordinating Agencies (Primary)

Under the National Response Framework (NRF), state and local agencies are responsible for initial incident response. The primary role of the State will be to supplement local efforts before, during, and after the incident. Other important state and local responsibilities are provided below.

4.1.1 Local

- Local Emergency Management Agencies

4.1.2 State

- Missouri State Emergency Management Agency

4.1.3 Federal

- Federal Emergency Management Agency Headquarters Logistics Management Directorate
- Federal Emergency Management Agency Region VII
- Federal Emergency Management Agency Field Units
- General Services Administration

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Other Local Agencies
- Local Non-Governmental Organizations and Faith-Based Organizations (FBOs)

4.2.2 State

- Missouri Office of Administration
- All other state departments
- Private Sector/Emergency Management Assistance Compact/Inter-State Agreements
- Non-Governmental Organizations and Faith-Based Organizations

4.2.3 Federal

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Energy
- Department of Health and Human Services
- Department of the Interior
- Department of Labor
- Department of Transportation
- Department of Veterans Affairs
- National Aeronautics and Space Administration
- Office of Personnel Management

5.0 Implementation and Execution

- Operational control and execution of logistic functions will be pushed down to the lowest effective level.

- FEMA will synchronize and integrate federal resource support capabilities from federal, state, local, NGOs, and private-sector responders.
- State requests for support will be submitted via ARF to FEMA, which will facilitate acquisition through available sources.
- FEMA Logistics will employ a “push/pull” concept for resource response. As requested by the State of Missouri, initial critical response assets will be “pushed” to ISBs and FSAs to establish an approximate 48-hour supply.
- SEMA will “pull” from FEMA as required and push resources to local jurisdictions upon request.
- Once operational control in the field is established, the “push” concept will transition to a “pull” concept. During the “pull” execution, in order to maintain effective resource oversight and handling, the RRCC, UCG, and/or JFO will communicate resource requirements through the Logistics Management Center based on actual commodity “burn rates.”
- Care must be taken throughout resource and logistics response operations to avoid oversupplying state and local agencies. The lack of staff and infrastructure to support resource and logistics operations dictates measured and coordinated support to avoid bottlenecks or backlogs.

5.1 Logistics Timeline of Key Activities and Support

- See the Master Logistics Execution Schedule in **Annex X**.
- SEMA will continue to support resource and logistics operations until local agencies can resume normal operations.
- Post-incident: Once sustainable supply chain activities have been restored and the State of Missouri and private industry have begun to return to normal operations, FEMA will recover issued non-consumable items and coordinate for materiel return, reallocation, and disposition, and materiel replenishment and refurbishment.

5.2 Logistics Management and Resource Support (LMRS)

- SEMA will manage state logistics and resource operations throughout the response and recovery. State resources will be adjudicated through senior leadership.
- SACC(s) are principally logistics and resource support center(s) that will manage and control the flow and distribution of resources into their respective areas of response based on the direction and control of the SEOC Logistics and Resources Branch at the SEOC.
- National Logistics Section will monitor the situation and prepare partners for response.
- LMRS will stage resources only with the concurrence of the National Logistics Coordinator.
- The Logistics Readiness Center (LRC) at FEMA HQ Resource Management Group will determine best sourcing of federal resources and transportation to meet requirements.
- FEMA Region VII will process all initial requests for support through the LRC, establish primary ISB activities at **REDACTED** and forward responder Base Camp activities throughout the affected area, and provide Logistics Coordinators to work in the SEOC to provide guidance and support. All Federal resources will be adjudicated through senior leadership at the NRCC/LRC prior to being deployed into the affected area(s).

5.3 Resources

Resources will be prioritized first for lifesaving and then for life sustaining response/recovery efforts. FEMA will immediately activate the Catastrophic Incident Supplement and begin deploying resources to ISBs in anticipation of a request for assistance by the State of Missouri. See attached appendices for resource requirements and priorities.

Planning Factors for Resource Requirements:

- Roads and airports serving the impact zone will be severely damaged and hamper logistics and resource efforts. Moreover, with major damage to bridges over the Mississippi River likely and substantial damage to states east of the river, major support may be necessary from the West. With extended travel times due to infrastructure impact and approximately 6-8 hours to on-load and off-load response resources, total execution time can be 14 hours or more depending on the resources carried.
- Fuel is a critical resource to support both ground and air operations. Implementation of the National Fuel Contract is vital to support lifesaving and life sustaining operations.
- Estimates of the number of people in the impact zone who will be affected by a catastrophic earthquake have been used as the basis for the estimates of resource requirements. A summary of data is provided below (also see **Tables D1-D13**):
 - Displaced individuals (2.7 persons/household) 842,002 (Source: MAE Center).
 - Tourists and visitors to Regions C and E are not considered in MAE Center data. According to the University of Missouri Tourism Economics and Research Initiative³, approximately 180,000 to 550,000 tourists and visitors are present in Regions C and E based on the season.
 - Projected Shelter Capacity: 907,303 (Source: National Shelter System).
 - Pets (dogs and cats) requiring shelter: 129,191-350,000⁴.
 - Tons of debris created: 6,500,000 (Source: MAE Center).
 - Meals per day: 4,742,572 (Source: FEMA calculations based on 2009 Census data).
 - Water per day: 7,113,858 liters (Source: FEMA calculations based on 2009 Census data).
 - Blankets: 4,742,572 (Source: FEMA calculations based on 2009 Census data).
 - Cots: 2,371,286 (Source: FEMA calculations based on 2009 Census data).
- In addition to water and meals, other resources will be required to support the population both in shelters and through bulk distribution at PODs and other locations. These resources include (but are not limited to): baby formula/food, diapers (baby and adult), feminine hygiene products, trash bags, flashlights, batteries, hygiene kits, waterless hand cleaner, toilet paper, paper towels, plastic utensils, bed sheets, portable toilets with replacement bags, wheel chairs, and generators.

³ Source: Economic Impact of Missouri's Tourism and Travel Industry: July 2006 – June 2007, Michael Kaylen, MU Tourism Economics Research Initiative.

⁴ Low-end number for pets is based on MAE Center data; high-end number is an estimate from Missouri SEMA.

5.4 Resource and Logistics Operational Facilities – REDACTED

Figure D3 Staging Areas - REDACTED

Figure D4 Aviation Staging Bases – REDACTED

- Movement of Resources
 - Tractor-trailers, rail, and airlift will be utilized to move resources to Distribution Centers, ISBs, Staging Areas, and Air Operations Bases.
 - Rotary wing operations and ground transportation will be used to move resources into the impact zone to support shelters and shelter in place populace, supply PODs, support Responder Base Camps, stock staging areas, and evacuate people out of the impact zone; prioritization will be based on medical needs.
 - Tractor-trailers will be utilized to move resources to/from the ISBs, Staging Areas, PODs, shelters, and base camps.

5.5 Points of Distribution

Local and State officials in Missouri continue to pre-identify possible locations for POD operations based on site capabilities, proximity to liquefaction zones, and probability of survival of the site following an earthquake. To the extent possible, initial POD activation and operation will be conducted by local emergency management officials who will coordinate these locations with state officials via direct communication between LEOCs and the SEOC. State PODs will support resourcing of heavy equipment, generators, and fuel.

As warranted and to support distribution of basic commodities to the affected general population, FEMA will work with the State of Missouri to establish a network of PODs in locales where local support is not possible. Shelf-stable meals, tents, tarps, bottled water, personal care items, and basic medical supplies will be distributed at PODs and may bypass staging areas depending on circumstances. Emphasis will be on non-traditional food preparation or shelf-stable meals in the catastrophically impacted areas. Due to road damage and other transportation impediments, non-traditional methods of transportation may be necessary to support transfer of commodities from PODs to those in need.

Actual POD locations and resources positioned at PODs within the impact zone will be validated by the UCG based on specific conditions after the earthquake based on area damage, debris clearance capabilities, road structure viability, security, and location of need. **Table D15** below indicates the approximate number of PODs to support jurisdictions within the affected area.

Table D15 Approximate Number of PODs per Jurisdiction

County	Population	PODs (15,000 served/day/POD)
Bollinger	11,841	1
Butler	41,471	3
Cape Girardeau	73,957	5
Carter	5,870	1
Dunklin	31,039	2
Iron	9,943	1

County	Population	PODs (15,000 served/day/POD)
Jefferson	219,046	15
Madison	12,341	1
Mississippi	13,266	1
New Madrid	17,480	1
Oregon	10,291	1
Pemiscot	18,193	1
Perry	18,847	1
Reynolds	6,202	1
Ripley	13,395	1
Saint Charles	355,367	24
Saint Francois	63,884	4
Saint Louis	992,408	66
Saint Louis City	356,587	24
Sainte Genevieve	17,542	1
Scott	40,855	3
Stoddard	29,069	2
Wayne	12,392	1
Total	2,371,286	161

5.6 Responder Base Camps (RBC)

RBCs will be set up within and near the impact zone to provide lodging and support for incident responders, including S&R teams, DMAT, Disaster Mortuary Operational Response Team (DMORT), shelter staff, law enforcement/security staff, various assessment teams, and other responders as necessary. It may also be necessary to provide RBCs for local government workers so they can remain close to their workplaces. In addition, other government-authorized responders may be allowed to lodge in RBCs. SEMA will establish state-run base camps initially, and will request FEMA base camps as needed. FEMA may task the RBC contractor, as well as U.S. Forest Service and/or DOD assets, to assist with RBC setup and support.

5.7 Fuel Plan

Given the scope of NMSZ response operations, fuel is a vital asset requiring diligent management and prioritization of use. The need for rotary wing operations is also more significant than typical response efforts and further necessitates a steady and reliable fuel supply. The provisions set forth below regarding fuel supply address four considerations: (1) evacuation; (2) support of responders, SEMA, and FEMA activities; (3) waivers of regulations; and (4) alternate methods of fuel delivery. Provisions were developed in consultation with FEMA Headquarters (HQ) Logistics, the Defense Logistics Agency, Congressional Research Services, and the U.S. Environmental Protection Agency (EPA). FEMA HQ

Logistics will continue to work closely with all Regional Logistics Chiefs for information regarding potential fuel disruption in a catastrophic incident and resulting needs.

5.7.1 Fuel for Evacuation of the Public in a NMSZ Incident

For citizens able to self-evacuate, the fuel transportation supply chain must be accommodated to allow fuel delivery to commercial/retail fuel outlets. Any issues regarding traffic patterns will be managed by the appropriate jurisdictional authority that will assist in facilitating fuel truck access.

No provisions have been specified at this time for SEMA or FEMA to provide power generation to commercial/retail fuel outlets. If commercial/retail fuel outlets do not have electricity, SEMA or Region VII Logistics may request generators for this purpose, and generators may be supplied based on prioritized availability.

5.7.2 Fuel for Response Operations

REDACTED.

5.7.3 Fuel Regulatory Issues

To expedite fuel delivery, waivers may be necessary for regulations governing fuel access, fuel type, quality, transport, and distribution. According to the Congressional Research Services September 2005 Report on Waivers following Hurricane Katrina, the following federal guidance applies to catastrophic response and regulatory waivers:

- The EPA, with concurrence from the DOE, may approve supplying gasoline meeting a less stringent, higher vapor-pressure standard than is usually allowed, and supplying diesel fuel to the states with sulfur content greater than previously allowed.
- The DHS may waive “coastwise laws” under the Merchant Marine Act of 1920 (the “Jones Act”) that, among other specifications, provides that only vessels built and owned by citizens of the United States and flagged in the United States can carry merchandise between United States ports. The waiver would apply to transportation of petroleum and refined petroleum products for a specified time period. The Secretary may also waive the coastwise laws generally for transportation of petroleum released from the Strategic Petroleum Reserve.
- The EPA may approve waivers to the Clean Air Act Section 211(c)(4)(C). States must request waivers and implement procedures to adhere to any procedures specified in the waiver. The Missouri Department of Natural Resources (MDNR) will evaluate necessary fuel waivers and submit waiver requests to the EPA.
- Also see Section 5.8 regarding transportation regulatory issues.

Many of these waivers are required in each state through which fuel must travel to reach its final destination. Coordination with other states is necessary to assure appropriate waiver requests are submitted.

5.7.4 Alternate Methods of Bulk Fuel Delivery

As discussed previously, damaged roadways, bridges, access roads, ramps, and overpasses are likely to disrupt or completely stop normal fuel transportation systems. DLA advises that many safe methods for transporting fuel, including rail, will be explored and utilized to ensure fuel support for responders and activities. Specific alternative plans for fuel transportation are under development at the national level.

Although very costly, bladder systems may serve as a method of fuel supply under extreme conditions of need.

5.8 Transportation Regulatory Issues

The DOT Federal Motor Carrier Safety Administration (FMCSA) may temporarily ease hours of service regulations for a specified period of days for certain carriers to allow transportation services to continue. As a result, covered drivers may drive longer hours than would otherwise be permitted. Drivers must have a copy of the Declaration of Regional Emergency in their possession. These waivers are required in each state through which fuel and other classes of supply must travel to reach their final destination. Coordination with other states is necessary to assure appropriate waiver requests are submitted. MoDOT will coordinate waiver requests and submit them to the FMCSA.

5.9 Logistics Execution Schedule by Phase

The appendices below provide logistics execution by phase for each of the ESFs as identified by the SLSC and IWG.

- Appendix D1 – ESF-1, Transportation.
- Appendix D2 – ESF-2, Communications.
- Appendix D3 – ESF-3, Public Works.
- Appendix D4 – ESF-4, Fire.
- Appendix D5 – ESF-5, Emergency Management.
- Appendix D6 – ESF-6, Mass Care.
- Appendix D7 – ESF-7, Resource Support and Logistics Management.
- Appendix D8 – ESF-8, Health and Medical.
- Appendix D9 – ESF-9, Search and Rescue.
- Appendix D10 – ESF-10, Oil and Hazardous Materials Response.
- Appendix D11 – ESF-11, Agriculture.
- Appendix D12 – ESF-12, Energy.
- Appendix D13 – ESF-13, Public Safety.
- Appendix D14 – ESF-14, Long Term Recovery.
- Appendix D15 – ESF-15, Public Affairs.
- Appendix D16 – ESF-16, Military Support.

6.0 Issuance of Disaster Policy, Doctrine, and Procedures

FEMA (HQ and Region VII), the State of Missouri, and local agencies must collaborate in development of disaster response and logistics doctrine, policies, and procedures. Development of all logistics policies, procedures, and doctrine related to this disaster response will occur in consultation and involvement with all appropriate agencies.

7.0 Communications

Communications capabilities will be severely reduced in the most heavily impacted portions of Missouri. Communication facilities (including, among others, television and radio stations, AM and FM transmitters/towers, cell phones and landlines, and internet service providers) will most likely be out of service due to the earthquake. Local communication methods will also be damaged. The nature of the damage is difficult to quantify. The scarcity of communication lines after the earthquake will cause congestion, and the infrastructure is likely to collapse under extreme demands. The MAE Center estimates that nearly 1,300 communication facilities will be damaged, with most damage occurring in Butler, Dunklin, Pemiscot, Stoddard, New Madrid, Mississippi, Scott, and Cape Girardeau Counties.

Communications are essential to the success of NMSZ response operations. To ensure success, communications must be interoperable and occur horizontally and vertically throughout local, state, and federal agencies. See Annex X, Logistics Execution Schedule by Course of Action and Phase, for deployment of type and kind of communication assets by phase during earthquake response operations.

8.0 Pre-scripted EMAC Requests and Requests for Federal Assistance

The EMAC offers state-to-state assistance during governor-declared state of emergency (receiving state). Assumedly, during a NMSZ incident, EMAC will be readily available and can be used to obtain needed resources quickly. The State of Missouri concept of operations is to utilize the EMAC system for non-impacted state resources in conjunction with the federal system through FEMA's mission assignment process. Both the federal and EMAC system are activated and managed through SEMA. The following process will be utilized to activate EMAC resources into Missouri:

1. The Governor of Missouri declares a disaster.
2. SEMA opens an EMAC event in the EMAC Operations System.
3. Missouri requests assets based on mission assignment.
4. The assisting state details available assets and estimates costs, and communicates this information to SEMA.
5. SEMA approves the resource and cost.
6. The resource from the assisting state mobilizes and deploys.

For resources not available through the EMAC, the State of Missouri will submit a federal ARF. The ARF is the working document used by FEMA for requesting federal assistance. The ARF is FEMA Form 136. Only the SEMA Director, Deputy Director, or Operations Branch Chief may approve an EMAC or ARF request.

8.1 Pre-scripted Requests for EMAC Assistance

Table D16 details resources that may be requested through the EMAC system from non-impacted states through pre-incident agreements with Missouri. Most resource requests are pre-developed to allow for rapid processing during a NMSZ incident.

REDACTED

Table D16 ESF-7 Pre-scripted EMAC Requests for Assistance

EMAC / REQ-A	EMAC Mission Assignments through SEMA	Providing State and Agency Point of Contact
	SEMA Operations Clerical Support	
	SEMA Operations Support	
	SEMA Planning Support	
	SEMA Structural Engineers	
	SEMA Public Assistance Support	
	SEMA Structural Assessment and Visual Evaluation (SAVE) Teams	California OES. POC:
	SEMA Deputy Operations Chiefs	
	SEMA Deputy Planning Chiefs	
	SEMA Deputy Logistics Chiefs	
	SEMA Deputy Finance Chiefs	
	SACC Deputy Logistics Chiefs	
	SACC Logistics Support	
	State EMAC A Team(s)	

8.2 Pre-scripted Requests for Federal Assistance

Table D17 details resources that may be requested from the Federal Government via FEMA Mission Assignments. Most resource requests (ARF) are pre-developed to allow rapid processing during a NMSZ incident.

REDACTED

Table D17 ESF-7 Pre-scripted Action Request Forms

ARF #	Requestor's Title	Requestor's Organization	Org Type	Request Description / Resource Type	Request Category	Request Priority
	Administrator	SEMA		Federal Fuel contract for diesel		
	Administrator	SEMA		Federal Fuel contract for (aviation) jet fuel		
	Administrator	SEMA		Federal Fuel contract for gasoline		
	Administrator	SEMA		Federal contract for water		
	Administrator	SEMA		Federal contract for meals		
	Administrator	SEMA		Federal contract for Base Camps		
	Administrator	SEMA		Federal Contract for Buses		
	Administrator	SEMA		Federal Contract for Vehicles (SUVs, Sedans, Pick-up, etc)		
	Administrator	SEMA		Federal Contracts for facilities and warehousing		
	Administrator	SEMA		Federal Contracts for commercial trucking		

Annex D Appendices

Appendix D1 – ESF-1, Transportation

Appendix D2 – ESF-2, Communications

Appendix D3 – ESF-3, Public Works

Appendix D4 – ESF-4, Fire

Appendix D5 – ESF-5, Emergency Management

Appendix D6 – ESF-6, Mass Care

Appendix D7 – ESF-7, Resource Support and Logistics Management

Appendix D8 – ESF-8, Health and Medical

Appendix D9 – ESF-9, Search and Rescue

Appendix D10 – ESF-10, Oil and Hazardous Materials Response

Appendix D11 – ESF-11, Agriculture

Appendix D12 – ESF-12, Energy

Appendix D13 – ESF-13, Public Safety

Appendix D14 – ESF-14, Long Term Recovery

Appendix D15 – ESF-15, Public Affairs

Appendix D16 – ESF-16, Military Support

Appendix D1 – ESF-1, Transportation

1.0 Situation

Saving and sustaining lives of Missouri residents and visitors in the immediate aftermath of a catastrophic earthquake is the highest priority for resource and logistics response operations. The joint state and federal effort involves deployment of ESF-1 assets to augment the State's local capabilities.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to support the establishment of lines of supply and transportation throughout the response phase in the immediate aftermath of a catastrophic earthquake on the New Madrid Fault in Missouri.

2.0 Mission

Missouri Department of Transportation (MoDOT), Missouri National Guard (MONG), United States Department of Transportation (DOT), United States Army Corp of Engineers (USACE,) and the United States Geological Survey (USGS) will provide technical and physical support for ESF-1 and the establishment of supply and transportation routes immediately following a catastrophic earthquake.

3.0 Execution

State and federal ESF-1 partners will provide transportation support within the impact zone. Assigned teams will be positioned to respond immediately after the earthquake according to priorities set by the UCG.

3.1 Concept of Logistics

The Concept of Logistics defines tasks necessary to support deployment of public works and transportation assets to support ESF-1 operations within Missouri in response to a catastrophic earthquake.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The logistical purposes of transportation for this phase are to:

1. Gain situational awareness of transportation operations taking place at the local level.
2. Create a coordinated response effort establishing lines of supply and transportation.

Achieving these goals will provide the framework to support transportation priorities and to set an initial course for deployment of assets.

End State of Phase

The desired end state of this phase is a fully developed logistical framework to support transportation priorities.

Local Mission-essential Tasks

Local Public Works (transportation/highway departments)

1. Integrate transportation needs into the local Incident Command to learn specific logistic requirements.

2. Begin and continue evaluations of all critical transportation infrastructure including damaged roads, bridges, waterways, rail lines, and airfields; identify transportation resource requirements, and report this information to the LEOC and SEOC as soon as possible.
3. Determine the status of local available equipment and resources, and provide reports with projected needs for the next operational period to the LEOC and SEOC.

State Mission-essential Tasks

Missouri Department of Transportation

1. Develop an ESF-1 Transportation-based information collection plan to identify needed resources.
2. Access the status of and activate appropriate resources for priority route clearance.
3. Work with local agencies in supporting on-scene management for a transportation response and logistic support.
4. Evaluate status of transportation infrastructure; temporary or alternate routes for damaged roads, bridges, waterways, rail lines, and airfields to provide support for lifesaving and life-sustaining services; and what resources are necessary to support the response.
5. Estimate staff and equipment needs to deploy Post-incident Bridge Inspection Teams, MSHP, air support, and MoDOT ground vehicles to begin infrastructure evaluations.
6. Ascertain immediate status and response capabilities of local (impact zone) MoDOT personnel.
7. Identify the support required to coordinate technical and administrative support, personnel, facilities, and communications.
8. Determine number of teams required to conduct the assessment of regulated and non-regulated dams.
9. Determine resource requirements and evaluate requests for assistance from local agencies and arrange for applicable state resources.
10. Complete Request for Assistance (REC A) and submit EMAC requests through SEOC.
11. Coordinate with SEMA to obtain resources and logistic support to ensure logistical needs are identified and met.
12. Obtain information from local ESF-1 and -3 (transportation/public works) agencies or individual companies on local transportation system status, and conduct reconnaissance to determine overall post-incident transportation capabilities left operational within the affected areas.
13. Coordinate inter-state and federal resources into local incident command structure.
14. Initiate transportation waivers with the DOT and any state that requires waivers through which resources will be transported.

Missouri State Highway Patrol

1. Identify personnel required from the MSHP to secure routes, regulate traffic flow, and enforce safety standards for evacuation and re-entry into evacuated area.
2. Establish the staffing needed to coordinate interstate highway movement on regulated routes with adjoining states.

Missouri National Guard

1. Establish the resources, equipment, and supplies needed to help MoDOT clear debris and rubble from essential government and military facilities, roadways, and bridges.
2. Advise SEMA on use of military equipment and resources required to support these activities.
3. Assess the resources required to provide technical and engineering assessments through the Full Spectrum Integrated Vulnerability Assessment Team and Air National Guard Civil Engineering units.
4. Provide ground and air transportation assets as needed to support the response.

Missouri Department of Conservation

Identify and provide all available resources to assist MoDOT with clearing debris and rubble from essential government facilities, roadways, and bridges with limited resources and supplies.

Federal Mission-essential Tasks

U.S. Department of Transportation

1. Monitor and report status of and damage to the transportation system and infrastructure as a result of the incident, conducting post-incident assessments of public transportation infrastructure, and identify necessary resources required to restore the system.
2. Perform activities under the direct authority of DOT elements as these relate to aviation, maritime, surface, railroad, and pipeline transportation and the logistic shortfalls.
3. Receive and respond to specific Mission Assignments from FEMA.
4. Send appropriate staff to the NRCC, RRCC, JFO, and SEOC, as well as other facilities, as requested and appropriate.
5. Provide and receive reports and updates as required from various agencies (local, state, and federal) regarding post-incident response capability.
6. Approve transportation waiver requests and communicate approval to requestors.
7. Identify communications requirements and capabilities.
8. Activate assets through the RRCC in advance of state requests, if possible.

United States Coast Guard

1. Evaluate and respond to identified waterways and ports, provide subject matter expertise (SME), and evaluate needed equipment and personnel.
2. Using port decision criteria and considerations from the Area Maritime Security Plan as a starting point, the Captain of the Port (COTP) will work with other members of the private sector and the port community to refine and apply these to the specific incident, identifying needed resources, equipment, and supplies.

3.1.2 Phase 2b Deployment

Purpose of Phase

The primary ESF-1 transportation purposes of this phase are to:

1. Procure resources necessary to support establishment of lines of supply and transportation.

2. Attain the ability to transport people, resources, equipment, and supplies to support all the responding organizations.

Achieving these goals will provide physical support for transportation priorities and serve as the starting point for operations.

End State of Phase

The desired end state of this phase is a fully active logistical framework to support transportation operations, and the ability to rapidly respond with ground and air assessments of roads, rail, air, waterway, and port damage prioritized to immediately open critical transportation infrastructure based on speed and life safety.

Local Mission-essential Tasks

Local Public Works and Transportation

Continue to provide situation updates and damage assessment data to the LEOC and SEOC. Assess the need for additional assets and request them from the SEOC.

State Mission-essential Tasks

Missouri Department of Transportation

1. Identify and deploy resources needed to create road blocks for non-accessible roads, damaged bridges, etc., and identify location for alternate routes, temporary bridges, etc. Initiate re-routing plans as needed.
2. Deploy the resources needed to clear and access primary transportation and supply routes.
3. Deploy available mutual aid resources and capabilities.
4. Establish communication with district offices and ascertain the capability, resource needs, and assets available from MoDOT headquarters, MoDOT district offices, maintenance buildings, and field assets.

Federal Mission-essential Tasks

U.S. Department of Transportation

1. Monitor and report status of and damage to the transportation system and infrastructure as a result of the incident, and determine required logistical support.
2. Coordinate the restoration and recovery of the transportation systems and infrastructure, and identify resource needs.
3. Coordinate and support prevention, preparedness, response, recovery, and mitigation activities among transportation stakeholders within the authority and resource limitations of responding agencies.
4. Activate federal assets as needed in coordination with the SEOC.
5. Contact contractors through national contracting vehicles to support the mission.
6. Execute emergency contract support for lifesaving and life sustaining services

U.S. Army Corp of Engineers

Evaluate and report status of federal dams and levees as these impact roadways and transportation routes. Assess the need for resources, equipment, and supplies.

U.S. Coast Guard

The COTP will make the final decision for planning and executing port re-opening priorities and procedures, as well as determining logistics support.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

Continue to identify and deploy transportation assets to the affected area as more areas become accessible, giving priority to life safety, preservation of property, and stabilization of the incident. Continue to supply required resource needs and logistical support.

End State of Phase

Achieve successful stabilization of the incident, and transition transportation capabilities back to the appropriate local, state, and federal authority in preparation for long-term recovery.

Local Mission-essential Tasks

Local Public Works (transportation/highway departments)

1. Participate in disaster response, damage assessment, and recovery missions determining the need for additional resources, equipment, and supplies.
2. Determine needs to maintain essential transportation services within the jurisdiction.

State Mission-essential Tasks

Missouri Department of Transportation

1. Continue to verify, analyze, and develop reports that provide current operating picture of the status of the transportation network while identifying necessary logistical support.
2. Continue to clear and rehabilitate transportation routes based on priorities established by the Principal State Official (PSO) or SEOC.
3. Prioritize known, essential resources:
 - a. Private contractors
 - b. Fuel, food, basic needs, and boots on the ground
 - c. Heavy equipment “go around” bridge supports to allow temporary access
4. Identify temporary staff to reconstitute depleted local ESF-1 staff.

Federal Mission-essential Tasks

U.S. Department of Transportation

1. Identify temporary alternative transportation solutions that can be implemented by others when systems or infrastructure are damaged, unavailable, or overwhelmed.
2. Perform activities conducted under the direct authority of DOT relative to aviation, maritime, surface, railroad, and pipeline transportation, and anticipate resources required.
3. Coordinate and support prevention, preparedness, response, recovery, and mitigation activities among transportation stakeholders within authorities and resource limitations of responding agencies.

4. Continue to accept Mission Assignments based on capacity, and monitor the status of other active mission assignments.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Public Works (transportation/highway dept.)
- Local Law Enforcement
- Local Incident Command

4.1.2 State

- Missouri Department of Transportation

4.1.3 Federal

- U.S. Department of Transportation

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Government
- Local Finance Department

4.2.2 State

- Missouri Office of Administration
- Missouri Department of Conservation
- Missouri Department of Corrections
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri National Guard
- Missouri State Highway Patrol/Water Patrol division
- Missouri Volunteer Organizations Active in Disaster
- Missouri Public/Private Partnership Organizations

4.2.3 Federal

- General Services Administration
- U.S. Department of Agriculture
- U.S. Department of Commerce
 - National Oceanic and Atmospheric Administration
- U.S. Department of Defense

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- U.S. Army Corp of Engineers
- U.S. Department of Energy
- U.S. Department of Homeland Security
 - Customs and Border Protection
 - Federal Emergency Management Agency
 - Transportation Security Administration
 - U.S. Coast Guard
 - Office of Infrastructure Protection
- U.S. Department of Interior
- U.S. Department of Justice
- U.S. Department of State
- U.S. Postal Service

Appendix D2 – ESF-2, Communications

1.0 Situation

After an earthquake, proactive communications plans must be in place to quickly implement temporary communications systems until permanent communications can be restored or installed. Constructing temporary and permanent interoperable emergency communication can be accomplished through a joint effort among local, state, and federal agencies working with private sector partners.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to establish and maintain interoperable emergency communications throughout the response phase in the immediate aftermath of a catastrophic earthquake on the New Madrid Fault in Missouri.

2.0 Mission

Missouri State Highway Patrol (MSHP), State Emergency Management Agency (SEMA), Federal Emergency Management Agency (FEMA), Missouri National Guard (MONG), the Department of Defense (DOD), and other Emergency Support Function (ESF)-2 partners and stakeholders will provide emergency communications resources to support local jurisdictions immediately following a catastrophic earthquake.

3.0 Execution

MSHP and ESF-2 partners, in coordination with FEMA, will provide emergency communications support within the impact zone. State and federal communications teams will be positioned to respond immediately after the earthquake according to priorities set by the UCG.

3.1 Concept of Logistics

The Concept of Logistics defines tasks necessary to support deployment of emergency communications resources to support ESF-2 operations within Missouri in response to a catastrophic earthquake.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The emergency communication logistical purposes of this phase are to:

1. Estimate resources necessary to support establishment and maintain interoperable emergency communications.
2. Validate and establish specific sites to support emergency communications.
3. Validate and establish supply chains for resources to support emergency communications.

Achieving these goals will provide the framework to support emergency communications priorities and to set an initial course for deployment of assets.

End State of Phase

The desired end state of this phase is a fully developed logistical framework to support emergency communications priorities.

Local Mission-essential Tasks

Local Emergency Management

1. Deploy staff to the field to survey their communications systems, assess damage, and list assets necessary to support issues that need to be addressed as a result of the earthquake.
2. Report local communications system damage to the LEOC and/or to the SEOC.

State Mission-essential Tasks

State Emergency Management Agency

Through the SEOC, process all requests for assistance via state, EMAC, and/or federal ESF-2 resources.

Missouri State Highway Patrol

1. Determine needs and evaluate the impact of the earthquake on the emergency communications system, and assess resource needs.
2. Determine if assistance is needed either through EMAC or through federal ESF-2 resources, and make relevant contacts to summon EMAC and federal resources.
3. After consulting with local government and private-sector representatives, determine what type of additional assistance is necessary, and submit requests for EMAC, federal ESF-2, or private resources.
4. With input from local jurisdictions and private-sector partners, activate state emergency support units to the area affected as necessary.

Missouri National Guard

MONG will coordinate with state agencies and assist them in restoring interoperable emergency communications.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Deploy federal ESF-2 liaison to the JFO and make contact with the SEOC to coordinate federal resource support to the State.
2. Activate the federal ESF-2 Incident Response Coordination Team to support resourcing needs for emergency communications operations.
3. In conjunction with the SEOC, assess the need for emergency communications assets and support.
4. Consider and process requests for resources as soon as possible.
5. Provide logistical support for deploying emergency communications elements required, and coordinate use of ISBs/Staging Areas, transportation of resources, and use of all national contracts and interagency agreements managed by DHS for response operations.

3.1.2 Phase 2b Deployment

Purpose of Phase

The primary emergency communications purposes of this phase are to:

1. Procure resources necessary to support emergency communications operations.
2. Activate specific sites to support emergency communications operations.
3. Transport resources to support emergency communications operations.

Achieving these goals will provide physical support for emergency communications priorities and serve as the starting point for operations.

End State of Phase

The desired end state of this phase is a fully active logistical framework to support emergency communications operations.

Local Mission-essential Tasks

Local Emergency Management

1. In consultation with state, federal, and private-sector agencies, support movement of resources to staging areas/warehouses as needed and able.
2. In consultation with state, federal, and private-sector agencies, receive resources to support emergency communications operations within the impact zone.

State Mission-essential Tasks

Missouri State Highway Patrol

In association with federal ESF-2, request emergency communication resources via EMAC or federal resources as needed through the SEOC to deploy to the area of need.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Provide support and facilities management at FEMA-managed sites such as the JFO, Distribution Center, ISBs, and base camps.
2. Continue to assess the need for additional emergency communications resources.

U.S. Department of Defense

Provide available logistical support to public emergency communication restoration operations.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

The purpose of this phase is to develop a sustained supply chain to support emergency communications operations through defined operational periods, scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is sustainable operational periods characterized by defined resource needs and a steady state of emergency support.

Local Mission-essential Tasks

Local Emergency Management

1. Continue to deploy staff to the field and to the LEOC to continuously survey emergency communications in order to determine communications issues that need to be addressed.

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2. Report findings to the LEOC, to be forwarded to the SEOC.

Local Public Works Departments

Support movement of resources and other large support equipment as able.

State Mission-essential Tasks

Missouri State Highway Patrol

Deploy available emergency communications resources to areas where these are most needed.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. After establishment of the JFO, process requests through the FCO or Operations Section Chief to the ESF-2 lead. The ESF-2 lead will be in close communication with the Federal Assistant Secretary for Preparedness and response for approval and identification of the resources that will be provided. The federal ESF-2 lead will work directly with the state ESF-2 lead to ensure the State's needs are being met.
2. When federal ESF-2 resources have arrived, coordination at the federal level will be through the ESF-2 lead at the JFO and the Operations Section Chief.

4.0 Oversight, Coordination, and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Emergency Management

4.1.2 State

- Missouri State Highway Patrol

4.1.3 Federal

- U.S. Department of Homeland Security/Federal Emergency Management Agency

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Law Enforcement
- Local Fire Department
- Local Emergency Medical
- Non-governmental Agencies
- Community Emergency Response Team

4.2.2 State

- State Emergency Management Agency
- Missouri Department of Conservation
- Missouri Department of Corrections
- Missouri Department of Transportation

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- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri State Water Patrol
- Missouri National Guard
- Missouri State Highway Patrol
- Civil Air Patrol
- Missouri Voluntary Organizations Active in Disaster

4.2.3 Federal

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Homeland Security
- U.S. Department of the Interior
- Federal Communications Commission

Appendix D3 – ESF-3, Public Works

1.0 Situation

Saving and sustaining lives of Missouri residents and visitors in the immediate aftermath of a catastrophic earthquake is the highest priority for resource and logistics response operations. The joint state and federal effort involves deployment of public works assets to augment the State's local capabilities.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to support ESF-3 with emergency debris clearance and maintaining and restoring CI/KR operations throughout the response phase and in the immediate aftermath of a catastrophic earthquake on the New Madrid Fault in Missouri.

2.0 Mission

State Emergency Management Agency (SEMA), Missouri Department of Natural Resources (MDRNMDNR), Missouri National Guard (MONG), US Army Corp of Engineers (USACE,) and other ESF-3 partners and stakeholders will provide augmentation to local organizations to support emergency debris clearance and maintaining and restoring CI/KR operations immediately following a catastrophic earthquake.

3.0 Execution

State ESF-3 partners, in coordination with USACE, SEMA and MDNR will provide public works support within the impact zone. Response teams will respond immediately after the earthquake according to priorities set by the UCG.

3.1 Concept of Logistics

The Concept of Logistics defines tasks necessary to support deployment of ESF-3 Public Works assets to support ESF-3 operations within Missouri in response to a catastrophic earthquake.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The public works logistical purposes of this phase are to:

1. Gain situational awareness of resources needed in public works operations taking place at the local level and bring them into a coordinated response effort.
2. Identify priority routes and resources needed for emergency debris clearance, and identify resources needed to assess the viability of CI/KR.

Achieving these goals will provide the framework to support ESF-3 Public Works priorities and to set an initial course for deployment of assets.

End State of Phase

The desired end state of this phase is a fully developed logistical framework to support public works priorities.

Local Mission-essential Tasks

Local Public Works or Emergency Management

1. Begin and continue evaluations of all CI/KR and public services, including water treatment and restoration, and assess resources required maintain or establish services.
2. Initiate emergency debris clearance activities and CI/KR support on public services as able, evaluating capacity and needs required for normalcy and restoration of:
 - a. Transportation corridors along priority routes.
 - b. Damaged public works assets in the local jurisdiction.
 - c. Status of the water supply in the area.
 - d. Status of wastewater in the area.
 - e. Status of power/power generation (generators) to CI/KR.
3. Relay damage reports and advance warning of all potential problem areas to the SEOC, and provide reports with projected needs for the next operational period to the SEOC.

State Mission-essential Tasks

State Emergency Management Agency

1. Coordinate engineering and public works activities in the State, and assess needs to support ESF-3 and the resources required to meet mission objectives.
2. Activate and coordinate the Structural Assessment and Visual Evaluation (SAVE) Coalition to determine viability and resource requirements to sustain and coordinate additional engineering and technical personnel from county and municipal governments, private contractors, and volunteers.

Missouri Department of Transportation

Coordinate procurement activities necessary to support resource and logistical needs.

Missouri Department of Health and Senior Services

Evaluate water system functions of private water supplies serving less than 15 connections, and private residential sewer systems, and identify resources required to establish or maintain services.

Missouri Department of Higher Education

Coordinate a response from Environmental and Safety Departments located in state higher education facilities to assist with logistical support.

Missouri National Guard

Support and provide equipment and personnel required to augment identified shortfalls.

Federal Mission-essential Tasks

U.S. Army Corp of Engineers

1. Coordinate with Federal Emergency Response Commission (FERC) regarding dam safety at Tom Sauk Dam and Bagnall Dam, identifying response resources and support logistics required.
2. Support FEMA logistics with the USACE Commodities Teams (potable water and ice) when needs have been identified.

3. Provide and receive reports and updates on the following as required from various agencies (local, state, and federal), and identify resources required to address the issues or accomplish the missions.
 - a. Post-incident response capability.
 - b. Efforts to clear priority routes.
 - c. Status of water supply.
 - d. Status of wastewater systems.
 - e. Status of federal dams and levees.
4. Activate assets through the RRCC in advance of state requests if possible.
5. Conduct Dam Response Action Contingency Planning for vulnerable structures.
6. Coordinate federal resources through the JFO.
7. Use internally trained personnel to support the mission assignment and coordinate all resource support requirements.
8. Call upon contractor personnel through national contracting vehicles to support the mission as needed.

3.1.2 Phase 2b Deployment

Purpose of Phase

Conduct emergency public works missions to minimize loss of life and damage to property, and to stabilize the incident. Identify the necessary resources and logistical support necessary and available to accomplish an effective ESF-3 Public Works deployment.

End State of Phase

The desired end state of this phase is a fully active logistical framework to support Public Works deployment.

Local Mission-essential Tasks

Local Public Works or Emergency Management

1. Calculate and convey municipal utility resource shortfalls, assess the need for additional assets, and submit requests to the SEOC.
2. Continue to provide situation updates and damage assessment data to the SEOC.
3. Provide situation updates and damage assessment data to the SEOC.

State Mission-essential Tasks

Missouri Department of Natural Resources

1. Assess the logistical requirements needed, and coordinate with USACE and the DOD in deploying military and private-sector assets.
2. Support emergency public information dissemination from the Joint Information Center (JIC) with updated media briefings regarding drinking water, sanitation, dam and levee safety precautions, debris clearance, wastewater systems, etc.

3. Coordinate with the federal ESF-3 coordinator (USACE) to obtain pre-established equipment caches and support supplies.
4. Begin assimilating information and resource requirements for re-establishment of damaged or destroyed public works facilities.
5. Administrate SAVE Coalition activities and support the resources required and logistical support necessary to support their evaluations and support of ESF-3.
6. Deploy available mutual aid resources and capabilities.
7. Determine what regulatory waivers may be required based on situation.

Federal Mission-essential Tasks

U.S. Army Corp of Engineers

1. Provide cellular and satellite communications, as well as radio equipment as needed to support the incident.
2. Continue to conduct joint assessments to determine priority of deployments, resource requirements, and logistical needs.
3. Activate federal assets for ESF-3 as needed in coordination with the SEOC as resource needs are identified.
4. Act upon pre-scripted ARFs for dam inspectors and dam assessments.
5. Sub-contract with EPA regarding water and wastewater resource needs and debris removal support.
6. Provide public works and engineering-related support for the changing requirements of domestic incident management and resource support for ESF-3.
7. Conduct post-incident assessments of public works and infrastructure, identify resource needs and logistical requirements, and provide technical assistance to include engineering expertise.
8. Provide and execute emergency contract support for lifesaving and life sustaining services to meet logistical requirements.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

The purpose of this phase is to develop a sustained supply chain to support public works operations through defined operational periods, scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is identified by sustainable operational periods characterized by defined resource needs and a steady state of public works support.

Local Mission-essential Tasks

Local Public Works or Emergency Management

1. Participate in disaster response and damage assessment identifying resources required to continue sustainment.
2. Determine needs required to maintain essential services within the jurisdiction.

3. Expedite local review of waivers to support donated resources, etc.

State Mission-essential Tasks

State Emergency Management Agency

Continue to work with MDNR in coordinating engineering and public works activities in the State.

Missouri Department of Natural Resources

1. Continue to verify, analyze, and develop reports that provide the COP of the incident and resources needed to achieve overall restoration.
2. Identify temporary staff to reconstitute existing local staff.
3. Assist with permitting request including waivers for local water and wastewater system.
4. Provide situational awareness and deployment requirements.
5. Transition from emergency debris clearance to debris removal planning and the required resources to support the activity.

Missouri Department of Economic Development

1. Public Service Commission: execute all laws relating to private industries operating in Missouri as public utilities.
2. Coordinate mutual aid agreements and memorandums of understanding (MOU).

Missouri Department of Health and Senior Services

Coordinate water system functions of private water supplies serving less than 15 connections, and private residential sewer systems.

Missouri Department of Higher Education

Coordinate response from Environmental and Safety Departments located in state higher education facilities.

Structural Assessment and Visual Evaluation Coalition

Coordinate additional engineering and technical personnel from county and municipal governments, private contractors, and volunteers.

Missouri Department of Conservation

Provide design assistance, construction assistance, and equipment.

Missouri National Guard

Provide equipment and personnel as required.

Federal Mission-essential Tasks

U.S. Army Corp of Engineers

1. Assist with permitting request and identify shortfalls and resource needs to complete the tasks.
2. Monitor the status of active mission assignments, and continue to accept mission assignments based on capacity.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Public Works or Emergency Management Department

4.1.2 State

- Missouri Department of Natural Resources
- State Emergency Management Agency

4.1.3 Federal

- Department of Defense/U.S. Army Corps of Engineers

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Emergency Management Departments
- Local Law Enforcement

4.2.2 State

- Missouri Department of Conservation
- Missouri Department of Economic Development
- Missouri Department of Health and Senior Services
- Missouri Department of Higher Education
- Missouri Department of Transportation
- Missouri National Guard
- Structural Assessment and Visual Evaluation (SAVE) Coalition

4.2.3 Federal

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Energy
- U.S. Department of Health and Human Services
- U.S. Department of Homeland Security
- U.S. Department of the Interior
- U.S. Department of Labor
- U.S. Department of State
- U.S. Department of Transportation

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- U.S. Department of Veterans Affairs
- U.S. Environmental Protection Agency
- General Services Administration
- Nuclear Regulatory Commission
- Tennessee Valley Authority
- American Red Cross
- Corporation for National and Community Service

Appendix D4 – ESF-4, Fire

1.0 Situation

Saving and sustaining lives of Missouri residents and visitors in the immediate aftermath of a catastrophic earthquake is the highest priority for resource and logistics response operations. The joint state and federal effort involves deployment of firefighting teams to augment the State’s local capabilities.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to support firefighting operations throughout the response phase in the immediate aftermath of a catastrophic earthquake on the New Madrid Fault in Missouri.

2.0 Mission

Missouri Division of Fire Safety (MDFS), Missouri Department of Natural Resources (MDNR), Environmental Protection Agency (EPA), Federal Emergency Management Agency (FEMA) and other Emergency Support Function (ESF)-4 partners and stakeholders will provide firefighting augmentation to local organizations in order to save and sustain lives of Missouri residents and visitors immediately following a catastrophic earthquake.

3.0 Execution

State ESF-4 partners, in coordination with FEMA and MDFS, will provide firefighting within the impact zone. Firefighting teams will be positioned to respond immediately after the earthquake according to priorities set by the UCG.

3.1 Concept of Logistics

State Departments and Agencies

- SEMA will serve as the lead state agency for providing logistics and forward staging area support for firefighting operations.
- FEMA will provide support by activating base camp contractors and mission assigning the U.S. Forest Service (USFS) and the DOD to provide additional support for establishing these facilities. Additional needs are as follows:
 - Transportation: air transport, pre-designated helispots and helibases, and forward staging areas
 - Airlift capabilities (moving the response personnel into the disaster area)
 - Heavy equipment to assist with access and demolition as needed
 - Safety monitoring
 - Access to the affected area
- Missouri ESF-7 will establish designated staging areas that will serve as collection and dissemination points for all incoming state fire and HAZMAT resources. The actual staging areas will be determined based on incident location.

Table D18 summarizes available fire capabilities within the State of Missouri.

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Table D18 Fire Assets by Type⁵

Asset	Region A	Region B	Region C	Region D	Region E	Region F	Region G	Region H	Region I
Engine Type I	138	89	158	231	97	167	71	74	49
Engine Type II	38	41	18	64	25	29	21	34	13
Engine Type III	7	7	1	6	3	7	11	1	1
Tanker Type I	85	60	76	167	58	124	50	61	36
Tanker Type II	34	41	28	65	29	58	27	24	8
Tanker Type III	11	6	4	18	6	16	16	8	1
Aerial Type I	8	1	5	13	1	9	3	1	3
Aerial Type II	4			1	1	3			
Incident Support Team			1	1		1			
Brush Truck	151	113	132	236	70	164	96	129	53
Foam Tender I	1	3		3	1		3	3	
Foam Tender II		1	1	2		1	1		
Mobile Comms I	6	2	5	3	4	1	5	1	
Mobile Comms II			2	6	3	2	1	1	1

According to the MAE Center, an estimated 2,101,800 structures within the eastern side of Missouri will be damaged in a catastrophic earthquake (86,800 moderately damaged, 43,800 completely destroyed). Of these buildings, 1,399 are fire stations that may sustain damage to firefighting equipment which could have been used in the affected area. Representative resources in the most impacted counties—Mississippi, New Madrid, Pemiscot, Dunklin, Scott and Stoddard—will be heavily to moderately damaged and unavailable for use.

The National Emergency Management Association developed the EMAC. EMAC identifies standard operating procedures (SOP) for requesting and sending interstate mutual aid when a state suffers or expects to suffer a major disaster and needs assistance from other states. During a catastrophic earthquake, the State of Missouri will need to request ESF-4 resources from the Federal Government through the EMAC system.

Federal Departments and Agencies

ESF-4 – Firefighting manages and coordinates mobilization for firefighting resources in support of local and state wildland, rural, and urban firefighting agencies. The USDA/USFS is the lead agency for this mission.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The firefighting logistical purposes of this phase are to:

1. Estimate resources necessary to support firefighting operations.

⁵ Source: Missouri Division of Fire Safety, Office of the Fire Marshal

2. Validate and establish supply chains for resources to support firefighting operations.

End State of Phase

The end state of this phase is a fully developed logistical framework to support firefighting priorities.

Local Mission-essential Tasks

Local Fire Chief or Local Emergency Management

1. Deploy local fire resources to the field to survey their communities and estimate the assets necessary to support fires suppression.
2. Coordinate local logistics through the Logistics Section at the LEOC.
3. Begin fire operations using available assets.
4. Utilize existing mutual aid agreements when local resources are exhausted.
5. Request from the LEOC to the SEOC additional assets.
6. Establish a method for logistical support of all fire responders in the area.
7. Coordinate resource requests with the SEOC and track allocated resources.

State Mission-essential Tasks

Missouri Division of Fire Safety, Office of the Fire Marshal

1. Coordinate state logistics through ESF-7, Logistics Section, at the SEOC.
2. Request additional fire assets using EMAC and state mutual aid agreements.
3. Request federal assets through the RRCC or JFO once state resources are exhausted.
4. Ensure the Logistics function is carried out in the SEOC. This function includes providing communication services and resource tracking; acquiring equipment, supplies, personnel, facilities, and transportation services; and arranging for food, lodging, and other support services as required.
5. Establish the appropriate level of staffing within the Logistics Section of the SEOC, continuously monitoring the effectiveness of the organization and modifying as required.
6. Coordinate closely with the LEOCs to establish priorities for resource allocation to critical areas.
7. Keep state leadership informed of all significant issues relating to the Logistics Section.
8. Coordinate with the SEMA, MONG, and other agencies to meet staging area requirements.
9. Coordinate with ESF-1 for transportation of assets into the affected area.

Federal Mission-essential Tasks

U.S. Department of Agriculture/U.S. Forest Service

1. Coordinate logistics support for federal fire assets through the RRCC or the JFO once established.
2. Coordinate mission assignments of DOD aerial assets into and out of the affected area.
3. Stage assets at the ISB/Staging Area **REDACTED**.
4. Ensure the logistics function is carried out at the federal level. Aggressively and proactively employ National Incident Management System (NIMS) concepts to maintain agility in adapting

to changing conditions, in-theater, pursuant to the objectives of the JFO/JFO Coordination Group. FEMA Logistics will maintain comprehensive situational awareness and visibility of the COP through constant, near real-time communications, coordination, synchronization, and collaboration capabilities reporting up to the RRCC.

5. Provide logistical support for deploying fire elements required, and coordinate use of ISBs/staging areas, transportation of resources, use of disaster fuel contracts, emergency meals, potable water, base camp services, supply and equipment resupply, and use of all national contracts and interagency agreements managed by the DHS for response operations.

3.1.2 Phase 2b Deployment

Purpose of Phase

The primary purposes of this phase are to:

1. Procure resources necessary to support firefighting operations.
2. Activate specific sites to support firefighting operations.
3. Transport resources to support firefighting operations.

End State of Phase

Local, state, and federal partners have implemented a fully active logistical framework to support firefighting operations.

Local Mission-essential Tasks

Local Fire Chief or Local Emergency Management

1. Utilize existing mutual aid agreements when local resources are exhausted.
2. Request from the LEOC to the SEOC, if established, additional assets.
3. Begin requesting logistical support from the SEOC, if established, as local resources are exhausted.
4. Prepare to receive resources to support fire operations.
5. Ensure the Logistics function is carried out in support of the LEOC. This function includes establishing logistics staging areas and points of distribution, and providing communications services and resource tracking; acquiring equipment, supplies, personnel, facilities, and transportation services; and arranging for food, lodging, and other support services as required.
6. Establish the appropriate level of branch and/or unit staffing within the Logistics Section, continuously monitoring the effectiveness of the organization and modifying as required.
7. Coordinate closely with Incident Command and LEOC Operations to establish priorities for resource allocation to activated Incident Commands within the affected area.
8. Keep the LEOC Director or Manager informed of all significant issues relating to the Logistics Section.

State Mission-essential Tasks

Missouri Division of Fire Safety, Office of the Fire Marshal

1. Request federal assets through the JFO by the SEOC when state resources are exhausted.
2. Coordinate contracting requirements for all ESFs.

3. Maintain supply of aviation fuel, vehicle fuel, mechanical support, parts, crew rotation, tools, water, food, and other supplies to support operations.
4. Ensure section objectives as stated in the Action Plans are accomplished within the Operational Period or within the estimated time frame.
5. Coordinate resource requests with supporting state agencies. Establish communications with both the local and federal government agencies. Track all allocated resources.

Federal Mission-essential Tasks

U.S. Department of Agriculture/U.S. Forest Service

1. Coordinate logistics support for federal fire assets through the RRCC or the JFO once established.
2. Coordinate with the GSA for commercial transportation, and/or Operations Section for DOD mission assignments, to acquire transportation assets as required to move fire/HAZMAT teams to selected locations in the State.
3. Establish the appropriate support logistics cadre within the Logistics Section to support state operations. Continuously monitor the effectiveness of the organization and modify as required.
4. Develop initial logistical push packages focusing on lifesaving and life sustaining items first.

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Coordinate with the State to stand up Logistics Field Offices and deploy Mobile Emergency Response Support (MERS) to help establish FEMA's initial on-site response capability.
2. Provide both the personnel and equipment to establish onsite information management capabilities to communicate both internally with the JFO and externally with other incident response activities.
3. Coordinate resource request with supporting federal agencies. Establish communications with both the local and state governments. Track all allocated resources.
4. At the Region VII level, procure local materials and services if possible except for items that are managed by FEMA Headquarters.
5. Develop and coordinate centralized ordering and shipping. Work with State Logistics to ensure delivery at appropriate distribution sites.
6. Establish appropriate push-pull distribution system.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

Develop a sustained supply chain to support firefighting operations through defined operational periods scaled as closely as possible to the needs of the incident.

End State of Phase

Implementation of sustainable operational periods is characterized by defined resource needs and a steady state of firefighting and HAZMAT support.

Local Mission-essential Tasks

Local Fire Chief or Local Emergency Management

1. Request from the LEOC to the SEOC additional assets as needed.

2. Ensure that transportation requirements in support of Logistics operations are met.
3. Ensure that all requests for facilities and facility support are addressed.

State Mission-essential Tasks

Missouri Division of Fire Safety, Office of the Fire Marshal

1. Ensure that transportation requirements in support of Logistics operations are met.
2. Ensure that all requests for facilities and facility support are addressed.
3. Participate in and provide input to the Demobilization Plan.

Federal Mission-essential Tasks

U.S. Department of Agriculture/U.S. Forest Service

1. Coordinate additional logistics support for federal fire and HAZMAT assets through the JFO.
2. Ensure that transportation requirements in support of Logistics operations are met, and ensure that all requests for facilities and facility support are addressed.
3. When federal ESF-4 resources have arrived, coordinate use of resources through the ESF-4 Lead at the JFO and the Operations Section Chief.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Fire Chief or Local Emergency Management

4.1.2 State

- Missouri Division of Fire Safety, Office of the Fire Marshal
- Missouri Department of Natural Resources

4.1.3 Federal

- U.S. Department of Agriculture/U.S. Forest Service

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Law Enforcement
- Local Public Health Authority
- Local Public Works

4.2.2 State

- Missouri Department of Public Safety
- Missouri Department of Natural Resources
- Missouri State Highway Patrol
- Missouri State Water Patrol

REDACTED

- Missouri State Emergency Management Agency
- Missouri Department of Agriculture
- Missouri Department of Conservation
- Missouri Department of Health and Senior Services
- Missouri Department Transportation

4.2.3 Federal

- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Homeland Security/Federal Emergency Management Agency
- U.S. Department of the Interior
- U.S. Department of State
- U.S. Environmental Protection Agency

Appendix D5 – ESF-5, Emergency Management

1.0 Situation

Saving and sustaining lives of Missouri residents and visitors in the immediate aftermath of a catastrophic earthquake is the highest priority for resource and logistics response operations. Under ESF-5, the joint state and federal effort involves oversight and deployment of the personnel, commodities, and equipment to establish the incident organization, and support all the other ESFs and incident objectives.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to support the emergency management activities associated with incident organization, coordination, damage assessment, and planning in support of operations throughout the response phase in the immediate aftermath of a catastrophic earthquake in Missouri.

2.0 Mission

The ESF-5 mission is to synchronize all state, federal, and non-governmental organizations to provide support for lifesaving, life-sustaining, and other resources necessary to supplement local, regional, private-sector, nonprofit, nongovernmental, and volunteer agency activities immediately following a catastrophic earthquake in this area of the State of Missouri, and to lessen the consequences of an earthquake and enhance recovery of the affected areas.

3.0 Execution

3.1 Concept of Logistics

The Concept of Logistics defines tasks necessary to direct the incident organization meet operational objectives within Missouri in response to a catastrophic earthquake

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

All LEOCs in the affected area will activate if safe to do so. The SEOC will activate along with the FEMA RRCC to provide an effective and coordinated effort to support emergency responders and ESFs in the affected and non-affected areas. Jointly, efforts will be made to establish the incident organization and conduct preliminary damage assessments to build a COP and determine what government services are needed.

End State of Phase

The SEOC and FEMA's RRCC will have been activated, and most LEOCs will have been activated. Staging areas will have been identified, and deployment of assets and resources to the affected areas will have begun. The SEOC will act as the clearinghouse for all information and damage assessments, and will communicate effectively with FEMA's RRCC.

Local Mission-essential Tasks

Local Emergency Management Incident Command

1. Activate LEOPs and Continuity of Government plans if available.
2. Activate LEOCs and support local emergency responders in the field.
3. Prepare list of critical resources needed to stabilize and terminate the emergency.

4. Activate damage assessment teams and start to deploy those teams into the affected areas.
5. Select alternate secure protected facilities and sites from which essential personnel can carry on their functions during the emergency period.
6. Maintain interoperable communications with all identified essential internal and external organizations, critical customers, and the public.

State Mission-essential Task

State Emergency Management Agency

1. Activate the SEOC.
2. Activate all state resources (listed in plans) as needed to save lives, protect property, and stabilize the incident.
3. Execute pre-scripted Executive Orders, Disaster Declaration Requests, EMAC requests, and ARFs.
4. Establish communications with the FEMA RRCC and begin coordinated response efforts.
5. Deploy Post-incident Bridge Inspection Teams.
6. Deploy SAVE Coalition.
7. Deploy CAP.
8. Activate interstate (Fire Mutual Aid, etc.) and intrastate (EMAC) to request mutual aid; mobilize units in Regions B, F, I, and G.
9. Coordinate provision of services, equipment, and supplies to support expedient operations associated with an earthquake disaster; and for approval and acquisition of equipment and supplies not available through normal purchasing channels and ordering time frames following an earthquake.
10. Immediately assess CI/KR for response resources (roads, bridges, incident command and control sites, staging area sites, communications systems, etc.).
11. Assist local government in locating sufficient space and equipment to sustain the relocating organization.
12. Provide support and resources so local governments can restore critical functions/services.

Federal Mission-essential Tasks

Federal Emergency Management Agency

1. Deploy the Missouri Liaison Officer (LNO) to the SEOC.
2. Deploy Type II IMAT to the SEOC.
3. Deploy MERS.
4. Issue applicable pre-scripted mission assignments.
5. Complete a Joint Incident Action Plan (IAP) with the State once the IMAT is in place to provide command and control of federal operations.
6. Establish a sustainable joint communication capability with federal, state, and local officials, and be prepared to support joint state/federal representation.

7. Provide resources and equipment at critical facilities in accordance with state priorities.
8. Request remote sensing of damages from the NRCC.

3.1.2 Phase 2b Deployment

Purpose of Phase

Emergency management will continue to identify and deploy resources to the affected areas as more areas become accessible to assist emergency response operations.

End State of Phase

Assets and resources are properly deployed and continuity is in place to meet the needs of the emergency responders and affected population.

Local Mission-essential Tasks

Local Emergency Management Incident Command

1. Assess the need for additional resources and request them from the SEOC.
2. Coordinate emergency operations with arriving responders
3. Continue to deploy damage assessment teams into the affected area to assess damage to government services, infrastructure, and critical facilities.
4. Report situational intelligence to the SEOC.

State Mission-essential Tasks

State Emergency Management Agency

1. Develop joint IAP with input from ESF Coordinators and FEMA.
2. Coordinate location of JFO with FEMA.
3. Coordinate with ESF-7 for provision of services, equipment, and supplies to support expedient operations associated with an earthquake disaster; and for approval and acquisition of equipment and supplies not available through normal purchasing channels and procurement time frames following an earthquake.
4. Continue to utilize EMAC to request mutual aid.
5. Deploy SEMA on-site representatives or State Preliminary Damage Assessment (PDA) Teams to the affected areas.
6. Deploy MONG LNOs to county-level EOCs.
7. Deploy Type II Incident Support Teams (IST) to County-level EOCs.

Federal Mission-essential Tasks

Federal Emergency Management Agency

1. Deploy Division Supervisors to the county-level EOCs.
2. Deploy the Type I IMAT to St. Louis (if needed).
3. Provide lifesaving and life sustaining support to the impacted area, including shelter, mass care, and medical facilities.

4. Coordinate provision of services, equipment, and supplies to support expedient operations and restore critical functions/services.
5. Provide resources and equipment at critical facilities in accordance with state priorities.
6. Continue to implement field tactical operations to further develop the command and control elements of the joint response. Implement the Branch Director and Division Supervisor concept.
7. Continue to establish the JFO and tactical field operations facilities.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

Continue to identify and deploy assets to the affected area as more areas become accessible. Continue to assist emergency responders by providing updated damage assessments in the affected area, and continuously develop valuable updates of damage conditions in the affected area. Continue to assist local governments by providing resources to assist them in restoring critical government services and functions.

End State of Phase

Continue to direct and control assets and resources. Continue to respond to the needs of the affected areas and start recovery efforts where appropriate. Most local governments will be operational to provide critical services and some non-essential services, or it will be determined by the end of this phase that the local government's damages are so severe that it is unable to continue to provide government services.

Local Mission-essential Tasks

Local Emergency Management Incident Command

1. Continue to assess resource needs and make requests to the SEOC.
2. Continue to report situational intelligence to the SEOC.
3. Work with state and federal agencies to develop goals to be self-sufficient by a certain date, and relay those goals to the SEOC.

State Mission-essential Tasks

State Emergency Management Agency

1. Continue to monitor and assess the situation and support local responders to stabilize the incident.
2. Request FEMA to activate additional specialized resources as needed.
3. Continue to utilize EMAC to request mutual aid.
4. Monitor the status of active mission assignments and move from rescue missions to recovery missions as needed.
5. Evaluate the viability of local governments.

Federal Mission-essential Tasks

Federal Emergency Management Agency

1. Continue to provide resources and equipment at critical facilities in accordance with state priorities.
2. Monitor the status of active mission assignments and move from rescue missions to recovery missions as needed.

4.0 Oversight, Coordination and Communication

4.1.1 Local

- Local Emergency Management Incident Command

4.1.2 State

- State Emergency Management Agency

4.1.3 Federal

- U.S. Department of Homeland Security/Federal Emergency Management Agency

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Law Enforcement
- Local Fire Department
- Local Emergency Medical
- Non-governmental Agencies
- Community Emergency Response Team

4.2.2 State

- Missouri Department of Conservation
- Missouri Department of Corrections
- Missouri Department of Transportation
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri State Water Patrol
- Missouri National Guard
- Missouri State Highway Patrol
- Civil Air Patrol
- Missouri Voluntary Organizations Active in Disaster

4.2.3 Federal

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Education
- U.S. Department of Energy
- U.S. Department of Health and Human Services

REDACTED

- U.S. Department of Homeland Security
- U.S. Department of Housing and Urban Development
- U.S. Department of the Interior
- U.S. Department of Justice
- U.S. Department of Labor
- U.S. Department of State
- U.S. Department of Transportation
- U.S. Department of Treasury
- U.S. Department of Veterans Affairs
- U.S. Environmental Protection Agency
- Federal Communications Commission
- General Services Administration
- National Aeronautics and Space Administration
- Nuclear Regulatory Commission
- Office of Personnel Management
- Small Business Administration
- Tennessee Valley Authority
- U.S. Postal Service
- American Red Cross

Appendix D6 – ESF-6, Mass Care and Emergency Assistance

1.0 Situation

Saving and sustaining lives of Missouri residents and visitors in the immediate aftermath of a catastrophic earthquake is the highest priority for resource and logistics response operations. Under ESF-6, the joint state and federal effort involves deployment of commodities, equipment, and goods and services to support mass care, sheltering, evacuation, bulk commodities distribution, and pet care that will augment capabilities of local jurisdictions and volunteer organizations.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to support mass-care, sheltering, evacuation, bulk distribution, and household pet care operations throughout the response phase in the immediate aftermath of a catastrophic earthquake in Missouri.

2.0 Mission

The ESF-6 mission is to provide support for mass care operations to provide life sustaining food, water, and shelter to disaster survivors (including household pets) in support of local mass care, feeding, and sheltering operations, and to facilitate and execute an effective and efficient evacuation operation, as required.

3.0 Execution

State ESF-6 partners, in coordination with FEMA, will provide mass care and sheltering within the impact zone, in addition to supporting those activities outside the impacted area. Priorities will be set by the UCG and ESF-6 leadership.

3.1 Concept of Logistics

The Concept of Logistics defines tasks necessary to support deployment of mass care, sheltering, and evacuation assets to support ESF-6 operations within Missouri in response to a catastrophic earthquake.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The primary mass care, sheltering, and evacuation logistical purposes of this phase are to:

1. Estimate resources necessary to support congregate care, bulk distribution, feeding, household pet shelter, and evacuation operations; and to coordinate resource needs/support with ESF-7.
2. Validate and establish specific sites to support mass care, bulk distribution, sheltering, and evacuation operations.
3. Validate and coordinate with ESF-7 to establish supply chains for resources to support ESF-6.

Achieving these goals will provide the framework to support ESF-6 priorities and to set an initial course for deployment of assets.

End State of Phase

The desired end state of this phase is a fully developed logistical framework to support ESF-6 priorities.

Local Mission-essential Tasks

Local Emergency Management/Local Mass Care Coordinators

1. Deploy staff to the field to survey communities to estimate the mass-care assets needed to respond to ESF-6 issues that arise as a result of the earthquake.
2. Relay survey information to the LEOC, which will forward this to the SEMA ESF-6 Lead.
3. Activate staff to determine where Points of Distribution (POD) will be located, and communicate that information to the ESF-7 section at SEOC.
4. Coordinate transport of lifesaving/sustaining commodities to survivors from PODs.
5. Evaluate evacuation needs, project the overall impact to the jurisdiction, and assess resources needed for transportation-assisted evacuees.
6. Transmit evacuation assessment information to the ESF-7 section at the SEOC. Baseline estimations should also be obtained relating to any functional or access needs that may arise.
7. Implement early evacuee tracking to support essential comprehensive evacuation operations.
8. Coordinate with the ESF-6 and ESF-7 representatives at the SEOC and the Evacuation Management Team (EMT) to ensure National Mass Evacuation Tracking System (NMETS) is utilized early in any localized evacuation, and so that any state-level tracking systems are implemented.

State Mission-essential Tasks

State Emergency Management Agency

1. Via the ESF-6 lead in the SEOC, process all requests for assistance via state, EMAC, and/or federal ESF-6 resources. ESF-6 will process resource requests and coordinate resourcing, storage, staging, and transportation with ESF-7.
2. Serve as the primary responsible agency to facilitate the EMT, and coordinate any logistical needs with ESF-7 for evacuation operations resources beyond their capabilities.
3. Work with the state ESF-6 Lead to consolidate all logistical requests, especially logistic requests forwarded to ESF-7.

Missouri Department of Social Services

1. Activate the Bulk Distribution Coordinator, who will report to the SEOC to support logistical needs.
2. In coordination with federal ESF-6, determine needs and evaluate the impact of the earthquake on the population residing within the impacted area, and assess resource needs. Based on that evaluation, request federal ESF-6 resources as needed.
3. Activate staff to assess resource needs to deal with large numbers of people in need of mass care.
4. Utilize basic communication methods such as phone and/or specialized computer systems (e-mail, Emergency Medical Information Management System [EMIMS], Homeland Security Information Network [HSIN]), and use wireless computer connectivity and satellite phone technology as available to contact ESF-6 staff. In addition, utilize video teleconferencing as able for FEMA and other video briefings.
5. If the initial assessment determines regional evacuation is required, work with the EMT to determine if assistance is needed either through EMAC or through federal ESF-6 resources, and submit any EMAC request or ARF through ESF-7 at the SEOC, as appropriate.

6. Utilize businesses, individuals, and organizations in the State, or licensed to do business in the State, to the extent feasible when procuring materials, supplies, equipment, or services.
7. Coordinate procurement of resources other than donated goods through ESF-7 and the Finance and Administration Section at the SEOC.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Deploy a federal ESF-6 liaison to the JFO and make contact with the SEOC and the MDSS ESF-6 Lead, and subsequently the Bulk Distribution Coordinator, to coordinate federal resource support to the State.
2. Through FEMA Logistics, coordinate and support ESF-6 resource acquisition. While FEMA Headquarters Mass Care has developed a robust procurement function, FEMA Region VII is the lead agency to support procurement and acquisition of ESF-6 commodities and resources.
3. Provide a Type III IMAT Logistics Section responsible for asset visibility, resource acquisition, transportation, warehousing, and property accountability and distribution. Specific to ESF-6, the following logistics needs are anticipated:
 - a. Cots, blankets, shelf-stable meals, and water.
 - b. Transportation support to voluntary organizations.
 - c. Logistics Resource Manager with a Purchase Card for micro purchases.
4. On behalf of ESF-6, support anticipated mission assignments for the following federal agencies for supplies, services and support:
 - a. Corporation for National and Community Service
 - b. U.S. Department of Agriculture
 - c. Animal and Plant Health Inspection Service
 - d. Food and Nutrition Service
 - e. U.S. Forest Service
 - f. U.S. Department of Health and Human Services
 - g. Transportation Security Administration
 - h. National Guard Bureau
 - i. U.S. Department of Defense.
5. Deploy to the RRCC or the JFO as directed, and integrate into the UCG, and process pre-scripted mission assignments and pre-scripted statements of work.
6. Provide communications support as necessary

General Services Administration

Provide disaster logistics assistance including the ordering, mobilization, logistics support, and demobilization of ESF-6 required resources as requested by FEMA Logistics.

3.1.2 Phase 2b Deployment

Purpose of Phase

The primary mass care and logistical purposes of this phase are to:

1. Procure resources necessary to support mass care operations.
2. Activate specific sites to support ESF-6 operations.
3. Transport resources to support health and medical operations.

Achieving these goals will provide physical support for ESF-6 priorities and serve as the starting point for provision of congregate care sheltering, household pet sheltering, bulk distribution, feeding, and evacuation efforts.

End State of Phase

The desired end state of this phase is a fully active logistical framework to support ESF-6 priorities.

Local Mission-essential Tasks

Local Emergency Management/Local Mass Care Coordinators

1. Work with the local Community Organizations Active in Disasters (COAD) and in consultation with MDSS to initiate mass-care operations including bulk distribution and congregate care infrastructure.
2. Open and staff PODs and receive and distribute resources to support the impacted population.
3. Accept and distribute resources to mass-care operations at shelters within their jurisdictions.

State Mission-essential Tasks

Missouri Department of Social Services

1. Request FEMA support as needed to evacuate individuals from within the impacted area. The EMT will request evacuation resources from ESF-7 through operations at the SEOC.
2. Coordinate with the SEOC, the Defense Coordinating Officer (DCO), FEMA, and U.S. Transportation Command (USTRANSCOM) to designate airports with sufficient movement on the ground as sites for patient evacuation. As defined in this plan, the site may be an EAS or CAS.
3. Submit EMAC requests through the SEOC including additional mass-care assets, cots, food, volunteer services, etc. State ESF-6 Lead should ensure EMAC resources are requested prior to requesting federal assets.
4. Supporting state resources will be coordinated via EMAC through ESF-7. Federal resources will be requested using an ARF submitted through ESF-7. The Operations Section will validate every EMAC request and ARF submitted for assistance to any state, tribal, territorial, or local government entities. Only the SEMA Director, Deputy Director, or Operations Branch Chief may approve an EMAC or ARF request.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. In consultation with MDSS, continue to assess needs for additional mass-care resources.

2. In concert with the ARC and other ESF-6 support agencies, use structures and processes described in the NIMS to sustain ESF-6 deployed assets.
3. Use contracting vehicles for the procurement of equipment and supplies not carried by Logistics or other federal agencies (housed in FEMA Headquarters Mass Care Unit). The following contracts, their status, and project completion date are as follows:
 - a. Mass Care Commodity and Services – In Development / June 1, 2009
 - b. Food Product BPA – Out for bid / May 31, 2009
 - c. DME Cache – Concurrence process / June 1, 2009
 - d. Shelter Kit – Concurrence process / June 1, 2009
 - e. Warehouse Support – Individual Assistance – Technical Assistance Contract (IA-TAC III) projected award date May 8, 2009
 - f. Cambro Contract – Completed

Mechanism to procure goods and services related to mass care. The Indefinite Delivery, Indefinite Quantity contract will be awarded to minimum of seven vendors, and is open to private-sector and voluntary organizations. The contract includes cots, blankets, comfort kits, clean-up kits, etc.
 - g. Contracts – Food Product Blanket Purchasing Agreement
 - i. Allows for efficient food ordering to support feeding missions
 - ii. Will have multiple vendors to prevent shortfalls thereby minimizing substitutions
 - h. Contracts – Durable Medical Equipment Cache
 - i. To support access and functional needs and medical needs at congregate care shelters
 - ii. Quickly provide aid to persons with access and functional needs to support congregate care shelters and/or local hospitals
 - i. Contracts – Shelter Kit
 - i. To support shelters and aid with basic necessities
 - ii. Allows for a more timely response to shelter requests for support without needing to source out
 - iii. Includes baby and hygiene kit supplies
 - j. Contracts – Warehouse and Support
 - i. To support Mass Care Emergency Assistance Unit specific missions, e.g. feeding missions, shelter kits, etc.
 - ii. To include space, equipment, personnel, etc.
 - iii. Should be able to be accomplished using the IA-TAC III Contract
 - k. Contracts – Food Carrier Containers
 - i. Sole-source contract agreement with Cambro
 - ii. Annual fixed price includes storage by Cambro for up to 5 years

- iii. Will allow FEMA to build up its food carrier container inventory to meet the needs of the next large-scale disaster.
- 4. Use Purchase Cards for acquisition of critical needs within the first 24-48 hours of request until long-term support can be accessed. The cards can be used as follows:
 - a. For one-time micro purchases of \$3,000 or less
 - b. Monthly limit of \$25,000 unless raised with authorized permission
 - c. Pre-approvals and pre-funding required before any purchases are made
 - d. Quick means of supporting shelters and affected populations
 - e. Used to buy baby/infant needs, food/water, comfort kit supplies, durable/consumable medical items, etc.
 - f. Only for critical needs within a 24- to 48-hour initial period before long-term support arrives.
- 5. Use the IA-TAC III for services as needed. The contract should be accessed as a last resort to minimize cost. Services available under the contract include:
 - a. Shelter operations
 - b. Full turn-key or partial support as needed
 - c. Feeding support
 - d. Fixed and/or mobile
 - e. Commodity distribution
 - f. Logistics support
 - g. Transportation, supply, procurement, communications, facilities, information technology (IT), and warehousing
 - h. Health and social services support
 - i. Security support services
 - j. Companion animal/pet support
 - k. Housing, feeding, and care
 - l. Facility restoration, support, and decommissioning.
- 6. Coordinate initiatives that require additional resources, reallocation of existing resources beyond agency authorization, and/or an adjustment in department or interagency policies or strategic priorities pursuant to Homeland Security Presidential Directive (HSPD)-1, and submit requests to Office of Management and Budget (OMB) for consideration.
- 7. Support funding of initiatives for FEMA operations identified in this OPLAN in accordance with the law, FEMA regulations and policy, and within the established procedures in HSPDs, NSPD-46/HSPD-15 Annex II, “Consolidation and Updating of Presidential Documents,” and the NRF. 44 *Code of Federal Regulations* (CFR) Part 13 establishes uniform administrative rules for federal grants and cooperative agreements and “sub-awards” to state, local, and tribal governments. Allowable costs will be determined in accordance with respective cost principles (OMB Circulars) for state, local, tribal, private nonprofit organizations, education institutions, etc. The signed FEMA State Agreement will provide assurances for FEMA Recovery Grants.

8. Utilize the mission assignment process derived from Section 402 of the Stafford Act, which provides that the President may direct any federal agency or department to provide personnel, equipment, and resources, with or without reimbursement, to assist state and local disaster relief efforts. Section 402 of the Stafford Act, General Federal Assistance, states, “In any major disaster, the President may – (1) direct any Federal agency, with or without reimbursement, to utilize its authorities and the resources granted to it under the Federal law (including personnel, equipment, supplies, facilities, and managerial, technical, and advisory services) in support of state and local assistance response and recovery efforts, including precautionary evacuations.” Additionally, each federal department or agency is responsible for identifying and gaining internal approval of funding mechanisms for enhancements identified in this plan. Initiatives requiring external department/agency action for funding or adjustment of policies will be coordinated pursuant to HSPD-1 and submitted to OMB for consideration.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

The purpose of this phase is to develop a sustained supply chain to support mass-care operations through defined operational periods, scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is indicated by sustainable operational periods characterized by defined resource needs and a steady state of mass-care support.

Local Mission-essential Tasks

Local Emergency Management/Local Mass Care Coordinators

1. Continue to deploy staff/volunteers to the field to continuously survey their community to determine the public health and medical issues that need to be addressed. Each local public health authority (LPHA) will report its findings to the LEOC and SEOC.
2. Work with local health care providers and LPHAs to continue shelter medical resource support.

Local Public Health Authority/ Emergency Medical Services

In conjunction with MDHSS and federal ESF-6 representatives, assess the ongoing situation, communicate with the entire healthcare infrastructure, and receive resources as these become available.

State Mission-essential Tasks

Missouri Department of Social Services

1. In conjunction with state ESF-7 and federal ESF-6, deploy available mass-care resources to areas where these are most needed.
2. Communicate to the SEOC if additional deployable assets or personnel are needed. This need will be determined based on hazard assessments and the status of the current operations. The sources available to provide these resources include SEMA ESF-7, EMAC, and federal resources.
3. Use additional buses and ambulances that have arrived through the EMAC process to provide ground transportation to move patients from triage points or evacuated hospitals to the designated medical evacuation airhead or treatment facility.

4. Track medical resupply from routine supply sources, in coordination with ESF-8. If those sources are insufficient or unable to provide needed supplies and pharmaceuticals to support congregate care sheltering in a timely fashion, ESF-7 at the SEOC will be contacted to either provide the needed supplies or assist with finding a source of supply. ESF-7 will coordinate, through the JFO as needed, to move the material into the affected area.
5. Work with the SEOC if assistance is needed to provide potable water to disaster victims. ESF-7 will transport this commodity into the impacted area, and local PODs or shelters will distribute it to survivors.

Missouri Department of Health and Senior Services

Via the SEOC, request medical resources to support mass-care operations as needed.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Via the ESF-6 primary lead, coordinate communications and resource sharing between FEMA Regions IV, V, VI, and VII at the NRCC.
2. After establishment of the JFO, submit requests through the FCO or Operations Section Chief to the ESF-6 Lead. The Region VII ESF-6 Lead will work directly with the state ESF-6 Lead to ensure the State's needs are being met.
3. Coordinate use of federal ESF-6 resources through the ESF-6 Lead at the JFO and the Operations Section Chief.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Emergency Management
- Local Mass Care Coordinator

4.1.2 State

Overall Mass Care Lead:

- Missouri Department of Social Services

Shelter Lead:

- American Red Cross

Feeding Leads:

- American Red Cross
- The Salvation Army
- Southern Baptist

Bulk Distribution:

- The Salvation Army
- Convoy of Hope

- AmeriCorps

Pet Sheltering:

- Humane Society of Missouri

Mass Care Emergency Response Team:

- State Emergency Management Agency

Functional, Access, and Medical Needs Support for Congregate Care Sheltering:

- Missouri Department of Health and Senior Services

4.1.3 Federal

- U.S. Department of Homeland Security/Federal Emergency Management Agency

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Community Organizations Active in Disaster
- Emergency Medical Services

4.2.2 State

- Missouri Department of Corrections
- Missouri Department of Mental Health
- Missouri Department of Elementary and Secondary Education
- Missouri Department of Higher Education
- Missouri Department of Natural Resources
- Missouri Community Service Commission
- AmeriCorps St. Louis Safety Corps
- Amateur Radio Emergency Services
- Missouri National Guard
- Adventist Community Services
- United Way 211
- Church of the Brethren
- Missouri Hospital Association
- Missouri Public Service Commission
- Association of Rural Electric Cooperative
- Missouri Public Utilities Association
- Missouri Funeral Directors and Embalmers Association
- Voluntary Organizations Active in Disaster

- Missouri Department of Agriculture

4.2.3 Federal

- U.S. Department of Agriculture
- U.S. Department of Defense
- U.S. Department of Health and Human Services
- U.S. Department of Homeland Security
- U.S. Department of Housing and Urban Development
- U.S. Department of the Interior
- U.S. Department of Justice
- U.S. Department of Labor
- U.S. Department of Transportation
- U.S. Department of the Treasury
- U.S. Department of Veterans Affairs
- General Services Administration
- Small Business Administration
- Social Security Administration
- U.S. Postal Service
- American Red Cross
- Corporation for National and Community Service
- National Voluntary Organizations Active in Disaster
- Other ESF-6 stakeholders and partners will work with primary and support agencies to support mission-essential objectives as required.

Appendix D7 – ESF-7, Resource Support and Logistics Management

Please refer to the body of Annex D. Annex D, as an ESF-7 planning document, sets forth the provisions to support ESF-7 activities. SEMA and FEMA have adopted a single concept of logistics to support the ESFs responsible to implement the concept of operations.

Appendix D8 – ESF-8, Health and Medical

1.0 Situation

Saving and sustaining lives of Missouri residents and visitors in the immediate aftermath of a catastrophic earthquake is the highest priority for resource and logistics response operations. The joint state and federal effort involves deployment of public health and medical assets to augment the local jurisdictional capabilities.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to support emergency medical and public health operations throughout the response phase in the immediate aftermath of a catastrophic earthquake on the New Madrid Fault in Missouri.

2.0 Mission

The Missouri Department of Health and Senior Services (MDHSS), Missouri National Guard (MONG), Missouri Funeral Directors and Embalmers Association (MFDEA), United States Department of Health and Human Services (USDHHS), Federal Emergency Management Agency, and other ESF-8 partners and stakeholders will augment local organizations to provide emergency medical and public health services in order to save and sustain lives of Missouri residents and visitors immediately following a catastrophic earthquake.

3.0 Execution

State ESF-8 partners, in coordination with FEMA and HHS, will provide public health and medical services within the impact zone. Medical teams will be positioned to respond immediately after the earthquake according to priorities set by the UCG.

3.1 Concept of Logistics

The Concept of Logistics defines tasks necessary to support deployment of health and medical assets to support ESF-8 operations within Missouri in response to a catastrophic earthquake.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The primary health and medical logistical purposes of this phase are to:

1. Estimate resources necessary to support health and medical operations.
2. Validate and establish specific sites to support health and medical operations.
3. Validate and establish supply chains for resources to support health and medical operations.

Achieving these goals will provide the framework to support ESF-8 priorities and to set an initial course for deployment of assets.

End State of Phase

The desired end state of this phase is a fully developed logistical framework to support ESF-8 priorities.

Local Mission-essential Tasks

Local Public Health Authority

1. Deploy staff to the field to survey their communities and report their findings to the LEOC and/or to the Department Situation Room (DSR) if the LEOC is not operational.
2. Activate staff to determine where medical PODs will be located, and communicate that information to the MDHSS DSR. Medical PODs may be co-located with PODs supporting commodities distribution and will distribute basic medications and medications to support chronic illnesses defined in the ESF-8 Appendix to Annex C.

Local Hospitals

1. Rapidly assess ability to (1) continue to care for the patients within the facilities and (2) provide for an influx of disaster victims.
2. Enter status on the EMSsystem and inform the LPHA, which will share this information with the LEOC and the DSR.

State Mission-essential Tasks**State Emergency Management Agency**

In the SEOC via ESF-8, process all requests for assistance via State, EMAC, and/or federal ESF-8 resources. ESF-8 will process resource requests and coordinate resourcing, storage, staging, and transportation with ESF-7.

Missouri Department of Health and Senior Services

1. Activate the DSR to provide logistical and communications support to MDHSS and local public health authorities in the affected area(s).
2. In coordination with federal ESF-8, determine needs and evaluate the impact of the earthquake on the medical delivery system. Based on that evaluation, request federal ESF-8 resources as needed through the SEOC. The SEOC will forward requests to the FEMA RRCC, where federal ESF-8 representatives will review the requests.
3. If initial assessment determines that patient evacuation is required, determine if assistance is needed either through EMAC or through federal ESF-8 resources, and make relevant contacts to summon EMAC and federal resources.
4. Activate state medical surge trailers to the area affected as necessary based on input from the MHA, Mid America Regional Council (MARC), and St. Louis Area Regional Resource System (STARRS).
5. Coordinate movement of MO 1-DMAT equipment and staff to the area.
6. In conjunction with the MFDEA, assess local mortuary capacity and capability in impacted zones and determine resource needs.

Missouri Department of Mental Health

1. Activate Incident Command at the Central Office and supply staff to the SEMA EOC. If available, staff will also deploy to the MDHSS DSR.
2. Determine need to evacuate mental health patients/consumers from state-run facilities. The Division of Developmental Disabilities will need medical support for the unique needs associated with transport of persons with severe disabilities, including EMS and ambulance assistance.
3. Coordinate with SEMA logistics and other agencies to meet staging area and additional resource requirements.

Federal Mission-essential Tasks

U.S. Department of Health and Human Services

1. Deploy a federal ESF-8 Liaison to the JFO and make contact with the SEOC and the MDHSS DSR to coordinate federal support to the State.
2. Activate the federal ESF-8 Incident Response Coordination Team.
3. In conjunction with the SEOC and MDHSS, assess need for supplies, pharmaceuticals, and equipment through the National Disaster Medical System (NDMS).
4. Consider and process requests for resources including requests for SNS assets, requests for activation of the NDMS, and other critical requests.

3.1.2 Phase 2b Deployment

Purpose of Phase

The primary health and medical logistical purposes of this phase are to:

1. Procure resources necessary to support health and medical operations.
2. Activate specific sites to support health and medical operations.
3. Transport resources to support health and medical operations.

Achieving these goals will provide physical support for ESF-8 priorities and serve as the starting point for mass treatment and care.

End State of Phase

The desired end state of this phase is a fully active logistical framework to support ESF-8 priorities.

Local Mission-essential Tasks

Local Emergency Management Departments

1. Receive resources to support health and medical needs of the shelter populations within the impact zone.
2. Open and staff PODs to receive and distribute resources to support health and medical operations.
3. Accept and distribute resources to support medical treatment stations at shelters within the impact zone to support health and medical operations.

Local Public Health Authorities

1. In consultation with MDHSS and local hospitals, support patient treatment and move patients to EASs, hospitals, or other locations.
2. Coordinate with local members of the MFDEA to support mass fatality operations.

Local Hospitals

Accept and distribute resources to support treatment of patients as able, and request resources through the LEOC.

Local Emergency Medical Services

1. Support transport and treatment of patients as able, and request resources through the LEOC as needed to sustain operations.
2. Provide ground transportation of patients to operational hospitals in the impact zone, and transport medical evacuees to EASs or other locations as needed.

State Mission-essential Tasks

Missouri Department of Health and Senior Services

1. Through the SEOC, request activation of the NDMS to support patient treatment and evacuation.
2. Coordinate ambulances to transport patients from evacuated hospitals, long-term care facilities, or other triage points to a designated heliport for patient evacuation.
3. Request support via EMAC and the National Ambulance Contract as necessary.
4. Coordinate with FEMA and USTRANSCOM to support NDMS activation and Medical Evacuation (MEDVAC) missions to move patients from the impact zone to designated facilities for definitive care.
5. Coordinate with USTRANSCOM to designate an airport with sufficient movement on the ground as a site for patient evacuation. As defined in this OPLAN, the site may be an EAS or Consolidated Collection Site.
6. Request EMAC medical resources through the SEOC to deploy to the area affected by the earthquake. These resources may include additional ambulances; medical professionals, such as physicians, nurses, hospital-based social workers, chaplains, and other ancillary support personnel; medical equipment and supplies; additional surge capability, such as field hospitals; and federal ESF-8 resources such as DMATs. State ESF-8 should ensure EMAC resources are requested prior to requesting federal assets using an ARF.
7. Coordinate resource support to provide basic medical care and public health surveillance at shelters using registered nurses (RN) and licensed practical nurses (LPN) provided through MDHSS or federal ESF-8 resources that are available.

Missouri Department of Mental Health

1. Through MDHSS, coordinate medical treatment and evacuation of MDMH state-operated facility patients/consumers. This may include additional security for medium and maximum security patients including high-risk security needs of the Sex Offenders Rehabilitation and Treatment Services Programs and Forensic Services requiring four levels of security (Maximum, Intermediate, Minimum, and Campus).
2. Request additional evacuation resources through ESF-7 at the SEOC as needed.

Federal Mission-essential Tasks

U.S. Department of Health and Human Services

1. Use structures and processes described in NIMS to sustain ESF-8 deployed assets and coordinate medical and non-medical logistics support with FEMA Logistics.
2. Respond to the request for NDMS activation to support patient treatment and evacuation.
3. Respond to the request for SNS assets
4. Respond to requests for activation of the National Ambulance Contract.

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5. Respond to requests for DMAT support.
6. In consultation with MDHSS, determine the need for additional health and medical resources.

U.S. Department of Defense - USTRANSCOM

1. Notify personnel and identify aircraft that can be used for the MEDVAC mission to move patients from impact zone to designated Federal Coordinating Centers for definitive care.
2. Designate aircraft and crews to evacuate patients.
3. Dispatch an aero medical staging unit to the designated evacuation Staging Area to coordinate patient movement.
4. In conjunction with the State, designate an airport with sufficient movement on the ground as a site for patient evacuation.
5. Via the Global Patients Movement Requirements Center (GPMRC), notify the Office of the Assistant Secretary of Defense for Health and the Veterans Administration Emergency Management Strategic Health Care Group to begin Federal Coordinating Center bed availability reports.
6. Via GPMRC, determine which patients are evacuated to specific Federal Coordinating Centers.

Federal Emergency Management Agency

Provide support and facilities management at FEMA managed sites such as the JFO, ISBs, and base camps. Examples of support include lodging, food, local ground transportation, fuel, potable water, and site security.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

The purpose of this phase is to develop a sustained supply chain to support health and medical response operations through defined operational periods, scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is identified by sustainable operational periods characterized by defined resource needs and a steady state of health and medical support.

Local Mission-essential Tasks

Local Public Health Authorities

1. Continue to deploy staff to the field and to their LEOCs to continuously survey their communities to determine the public health and medical issues that need to be addressed, and report findings to the LEOC and DSR.
2. The local mass care and sheltering coordinator, work with local health care providers and local public health authorities, continues shelter medical resource support.
3. With hospitals and EMS, and in conjunction with MDHSS and federal ESF-8 representatives, assess the ongoing situation and communicate with the entire healthcare infrastructure.
4. Continue to coordinate with MFDEA and the MDHSS for resource support of mass fatality operations.

Local Public Works Departments

Support movement of trailers and other large medical support equipment as able.

State Mission-essential Tasks

Missouri Department of Health and Senior Services

1. In conjunction with local health and EMS departments, the MHA, MDMH, and federal ESF-8 representatives, assess the ongoing situation within the entire healthcare infrastructure and report to the SEOC all ESF-8 requirements and additional resources required beyond the State's capability.
2. Deploy available medical resources to areas where they are most needed such as triage points, congregate care shelters, or healthcare facilities that require additional medical professionals.
3. Coordinate staffing and operation of the State's Mobile Medical Unit (MMU). Staffing can be accomplished via Show-Me Response and/or using additional medical professionals available through EMAC.
4. Communicate to federal ESF-8 requests for deployable field hospitals if needed. This need will be determined based on hazard assessments and the status of the current hospitals. The options to provide this resource include EMAC and federal ESF-8 resources.
5. Through the SEOC, request additional DMORTs as necessary to provide assistance to the medical examiner in the identification and preparation process. Additional DOD mortuary affairs personnel will be requested to provide assistance to the medical examiner, if required.
6. Through the SEOC, request the Disaster Portable Morgue Unit (DPMU) Team as needed.
7. Use additional ambulances that have arrived through the EMAC to provide ground transportation to move patients from triage points or evacuated hospitals to the designated medical evacuation airhead.
8. Track medical resupply from routine supply sources. If those sources are insufficient or unable to provide needed supplies and pharmaceuticals in a timely fashion, federal ESF-8 will be contacted to either provide the needed supplies or assist the supply source, through the JFO, to move the material into the affected area.
9. Work with the SEOC and the JFO to provide potable water to disaster victims.
10. Provide medical support to all congregate care shelters by deploying available medical personnel through either EMAC or requests for federal ESF-8 resources.
11. If the local community and MDHSS are unable to provide medical coverage for shelters, request resources via federal ESF-8.

Missouri Department of Mental Health

1. Coordinate deployment of mental health and substance abuse professionals.
2. Coordinate with MDHSS for EMAC or federal ESF-8 resources for mental health and substance abuse professionals. EMAC requests will be made through the EMAC A Team at the SEOC.
3. Work with MDHSS to deploy contracted Community Mental Health Center staff to assist with mental health services through the medical trailer system.

Federal Mission-essential Tasks

U.S. Department of Health and Human Services

1. After establishment of the JFO, requests will go through the FCO or Operations Section Chief to the ESF-8 Lead. The ESF-8 Lead will be in close communication with the HHS Assistant

Secretary for Preparedness and Response for approval and identification of the resources that will be provided. The federal ESF-8 lead will work directly with the state ESF-8 lead to ensure the State's needs are being met.

2. When federal ESF-8 resources have arrived, coordinate at the federal level through the ESF-8 lead at the JFO and the Operations Section Chief.
3. If requested by the State, federal ESF-8 resources include U.S. Public Health Service (PHS) teams to augment the State of Missouri's requirement for environmental health services, such as food service and potable water inspections and evaluations that will be necessary following the earthquake.
4. The PHS commissioned corps has in its ranks health professionals who can be deployed to assist a variety of public health missions. These professionals are deployed through federal ESF-8.
5. DMORT(s) may be deployed to provide assistance to the medical examiner in the identification and preparation process. Additional DOD mortuary affairs personnel will be requested to provide assistance to the medical examiner, if required.
6. The ESF-8 Incident Response Coordination Team Logistics Section will coordinate with JFO and SEMA Logistics to ensure they provide a one-stop shop for logistical support, medical re-supply, and non-medical support (transport, food, security, etc.) for deployed HHS/ESF-8 assets.

U.S. Department of Defense

1. Through USTRANSCOM, begin fixed-wing patient evacuation from the designated site to designated Federal Coordination Centers, which will in turn transfer patients to the receiving hospitals for definitive care.
2. Through GPMRC, coordinate evacuation of patients from the patient CASS to the designated Federal Coordination Center.
3. Through USTRANSCOM, provide MDHSS with patient tracking data for any patients evacuated into NDMS system.
4. Through USTRANSCOM, use the in-transit patient visibility system, TRACES2, to track which patients go to which Federal Coordination Center. Once there, the Federal Coordination Center will keep the NDMS system informed of the status of evacuated patients. Information on evacuated patients will be provided back to the State through ESF-8 at the JFO.
5. Additional field hospitals (DOD assets) may be required to temporarily replace existing hospital infrastructure that has been damaged. This requirement may be met by deployment of MONG or DOD field hospitals.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Public Health Authorities

4.1.2 State

- Missouri Department of Health and Senior Services

4.1.3 Federal

- U.S. Department of Health and Human Services

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Public Works
- Law Enforcement
- Social Services/Mental Health
- Missouri Funeral Directors and Embalmers Association (Local Members)

4.2.2 State

- Missouri Department of Mental Health
- Missouri Department of Elementary and Secondary Education
- Missouri Department of Higher Education
- Missouri Department of Transportation
- Missouri State Highway Patrol/Missouri Water Patrol
- Missouri Department of Social Services
- Missouri National Guard
- Missouri Funeral Directors Association
- Missouri Department of Agriculture
- Missouri Department of Corrections
- Missouri Department of Natural Resources
- Voluntary Organizations Active in Disaster
- Missouri Department of Public Safety
- State Emergency Management Agency

4.2.3 Federal

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Energy
- U.S. Department of Homeland Security
 - Federal Emergency Management Agency
 - Office of Infrastructure Protection
- U.S. Department of the Interior

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- U.S. Department of Justice
- U.S. Department of Labor
- U.S. Department of State
- U.S. Department of Transportation
- U.S. Department of Veterans Affairs
- Environmental Protection Agency
- General Services Administration
- U.S. Agency for International Development
- U.S. Postal Service
- American Red Cross

Appendix D9 – ESF-9, Search and Rescue

1.0 Situation

Saving and sustaining lives of Missouri residents and visitors in the immediate aftermath of a catastrophic earthquake is the highest priority for resource and logistics response operations. The joint state and federal effort involves deployment of search and rescue assets to augment the State’s local capabilities.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to support search and rescue operations throughout the response phase in the immediate aftermath of a catastrophic earthquake on the New Madrid Fault in Missouri.

2.0 Mission

Missouri Division of Fire Safety (MDFS), Federal Emergency Management Agency (FEMA), and other Emergency Support Function (ESF)-9 partners and stakeholders will provide search and rescue augmentation to local organizations in order to save and sustain lives of Missouri residents and visitors immediately following a catastrophic earthquake.

3.0 Execution

State ESF-9 partners, in coordination with FEMA, will provide search and rescue services within the impact zone. Urban Search and Rescue (US&R) and other S&R teams will be positioned to respond immediately after the earthquake according to priorities set by the UCG.

3.1 Concept of Logistics

MDFS will serve as the lead state agency for providing logistics and forward staging area support for state S&R operations. The goal is to provide immediate logistics support to S&R assets deploying to the affected area in Missouri after a major earthquake to augment local S&R capabilities and to save lives.

Table D19 lists S&R assets maintained by regional entities in Missouri which may be available to assist during a catastrophic event.

Table D19 Regional Search and Rescue Assets Located in Missouri

Type	Location	Number
Collapse Rescue Team Type I	Region C	4
	Region D	2
	Region E	1
	Region F	3
	Region G	1
	Region I	1
Collapse Rescue Team Type II	Region A	1
	Region D	21
	Region E	1
Rescue Squads	Region A	18

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Type	Location	Number
	Region B	13
	Region C	27
	Region D	77
	Region E	16
	Region F	37
	Region G	23
	Region H	28
	Region I	10
Disaster Certified K9	Statewide	7

Note: Additional assets may be available throughout the State of Missouri but these are not accurately recorded due to personnel overlap, discipline association, and current lack of an oversight agency at the state level for independent teams.

FEMA manages U.S. US&R capabilities. The system is built around a core of task forces prepared to deploy immediately and initiate operations in support of ESF-9. These task forces are staffed primarily by local fire department and emergency services personnel highly trained and experienced in collapsed structure S&R operations, and they possess specialized expertise and equipment. ISTs provide coordination and logistical support to US&R task forces during emergency operations. They also conduct needs assessments and provide technical advice and assistance to state, tribal, and local government emergency managers. ISTs are staffed by personnel from US&R task forces. Finally, a cadre of technical specialists from other federal agencies will provide expertise in various US&R disciplines and mobilize as needed.

FEMA currently maintains 28 Type I US&R task forces geographically dispersed nationwide. The ability of FEMA to respond to and provide support to ESF-9 is predicated on the current national and regional preparedness levels, as well as the agency's resource availability due to ongoing incident response. Federal S&R assets located in FEMA Region VII are listed in **Table D20**.

Table D20 FEMA Region VII Search and Rescue Assets

Description	Location
Missouri Task Force 1	Columbia, Boone County, Missouri
Nebraska Task Force 1	Lincoln, Lancaster County, Nebraska

According to the MAE Center, after a 7.7 magnitude earthquake, 2,101,800 buildings will be totally damaged and 86,800 will sustain moderate damage. There will be 1,562 collapsed buildings in the affected area. All buildings that sustain damage will need to be searched for potential victims. **Table D21** lists estimated resources required to support S&R efforts.

Table D21 Estimated Search and Rescue Needs for Missouri

Type I		Type II		Type III		Type IV	
Teams	Personnel	Teams	Personnel	Teams	Personnel	Teams	Personnel
20	1400	6	192	195	4290	39	234

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

Provide logistical support during efforts to locate affected residents, reduce loss of life, and provide S&R services following a catastrophic earthquake.

End State of Phase

Local responders have established logistical support through the SEOC for ongoing S&R missions in the affected area.

Local Mission-essential Tasks

Local Emergency Management Incident Command

1. Coordinate logistical and resource needs at the LEOC to support S&R operations.
2. Initiate local S&R operations using all available resources.
3. Execute existing mutual aid agreements when exhaustion of local resources is expected.
4. Request additional assets through the LEOC, which will submit requests through the SEOC as needed.
5. Establish communications for S&R operations.
6. Set up a base of operations for S&R operations.
7. Establish logistical support for all S&R responders in the area in coordination with the LEOC and SEOC.
8. Coordinate resource requests with the SEOC and track allocated resources.

State Mission-essential Tasks

Missouri Division of Fire Safety, Office of the State Fire Marshal

1. Coordinate resource requests through the SEOC using EMAC and state mutual aid agreements.
2. Request federal assets through the SEOC when state resources are exhausted.
3. Coordinate with ESF-1 Air Operations and ESF-8 to acquire aerial assets for transportation of S&R assets into the area and victims out of the area.
4. In coordination with ESF-8, identify and set up casualty collection points within the affected area and coordinate logistical support for casualty collection points.
5. Coordinate with ESF-13 and ESF-7 to contract and acquire security personnel for S&R operations as needed.
6. Ensure the Logistics function is carried out in the SEOC including communication services and resource tracking, equipment, supplies, personnel, facilities, transportation services, food, lodging, and other support services as required. Coordinate with ESF-7 for resources beyond ESF-9 capabilities.
7. Coordinate closely with the LEOCs to establish priorities for resource allocation to critical areas.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Coordinate logistical support for federal S&R through the IST to the RRCC or the JFO when established.
2. Coordinate mission assignments for aerial assets into and out of the affected area.
3. **REDACTED.**
4. Ensure the logistics function is carried out at the federal level. Aggressively and proactively employ the concepts of the NIMS to maintain agility in adapting to changing conditions, in-theater, pursuant to the objectives of the JFO/JFO Coordination Group. FEMA Logistics will maintain comprehensive situational awareness and visibility of the COP through constant, near real-time communications, coordination, synchronization, and collaboration capabilities reporting up to the NRCC.

3.1.2 Phase 2b Deployment

Purpose of Phase

Provide logistical support during efforts to locate affected residents, reduce loss of life, and provide S&R services following a catastrophic earthquake.

End State of Phase

State and federal logistical support is coordinated and ongoing to support the S&R efforts in the affected area.

Local Mission-essential Tasks

Local Emergency Management Incident Command

1. Continue to coordinate resource and logistics needs through the Logistics Section at the LEOC.
2. Utilize existing mutual aid agreements when local resources are exhausted.
3. Request logistical support from the SEOC as local resources are exhausted.
4. Ensure the Logistics function is carried out in support of the LEOC. This function includes establishing logistics staging areas and points of distribution, providing communications services and resource tracking; acquiring equipment, supplies, personnel, facilities, and transportation services; and arranging for food, lodging, and other support services as required. Coordinate these requirements with the SEOC and ESF-7.
5. Establish the appropriate level of branch and/or unit staffing within the Logistics Section, continuously monitoring the effectiveness of the organization and modifying as required.

State Mission-essential Tasks

Missouri Division of Fire Safety, Office of the State Fire Marshal

1. Request additional S&R assets through the SEOC using EMAC and state mutual aid agreements as needed.
2. Request federal assets through SEOC when state resources are exhausted.
3. Coordinate support provided by businesses, individuals, and organizations in the State or entities licensed to do business in the State.

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4. Maintain supply of aviation fuel, vehicle fuel, mechanical support, parts, crew rotation, lumber, tools, water, food and other supplies to support 24/7 S&R operations. Coordinate procurement through ESF-7 for resources outside normal supply capabilities.
5. Ensure section objectives as stated in the Action Plans are accomplished within the Operational Period or within the estimated time frame.
6. Coordinate with the GSA for commercial transportation, and/or Operations Section for DOD mission assignments to acquire transportation assets as required to move S&R teams to selected locations in the State.
7. In coordination with SEMA or GSA, contract for personnel and material handling equipment to offload resources upon arrival in the State.
8. In coordination with GSA, acquire 4x4/sport utility vehicles for S&R team utilization
9. In coordination with GSA (as applicable), execute contracts for hardened facilities/safe shelter for S&R teams and their assets within the affected area or on the perimeter.
10. Coordinate with EMAC Coordinator for potential movement of EMAC S&R resources (as available).
11. Coordinate resource requests with supporting state agencies. Establish communications with both local government and Federal Government agencies in coordination with ESF-2. Track all allocated resources.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Continue to coordinate logistic support for federal S&R through the IST to the RRCC or the JFO once established.
2. Develop logistical push packages focusing on lifesaving and life sustaining items first.
3. Coordinate with the state to stand up Logistics Field Offices, and deploy MERS to help establish FEMA's initial on-site response capability.
4. Provide both the personnel and equipment to establish onsite information management capabilities to communicate both internally with the JFO and externally with other incident response activities.
5. Coordinate resource requests with supporting federal agencies. Establish communications with both the local and state governments. Track all allocated resources.
6. Procure local materials and services within Region VII if possible except for items managed by FEMA HQ.
7. Develop and coordinate centralized ordering and shipping. Work with State Logistics to ensure delivery at appropriate distribution sites.
8. Establish appropriate push-pull distribution system.
9. Establish on-scene Logistics Management to include vehicle management, facilities and real property management, and personal/accountable property management.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

Provide logistical support during efforts to locate affected residents, reduce loss of life, and provide S&R and recovery services following a catastrophic earthquake.

End State of Phase

Termination of logistical requirements required for transition back to local resources

Local Mission-essential Tasks

Local Emergency Management Incident Command

1. Coordinate local logistics through the Logistics Section at the LEOC.
2. Request additional assets through the LEOC to the SEOC.
3. Ensure that all requests for facilities and facility support are addressed.

State Mission-essential Tasks

Missouri Division of Fire Safety, Office of the State Fire Marshal

1. Request federal assets through the JFO when state resources are exhausted.
2. Ensure that transportation requirements, in support of Logistics operations, are met.
3. Ensure that all requests for facilities and facility support are addressed.
4. Participate and provide input to the Demobilization Plan.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Coordinate logistics support for federal S&R through the JFO.
2. Ensure that transportation requirements in support of logistics operations are met, and ensure that all requests for facilities and facility support are addressed.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Emergency Management Incident Command

4.1.2 State

- Missouri Division of Fire Safety, Office of the State Fire Marshal

4.1.3 Federal

- U.S. Department of Homeland Security/Federal Emergency Management Agency

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Law Enforcement

- Local Fire Department
- Local Emergency Medical
- Non-governmental Agencies
- Community Emergency Response Team

4.2.2 State

- State Emergency Management Agency
- Missouri Department of Conservation
- Missouri Department of Corrections
- Missouri Department of Transportation
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri State Water Patrol
- Missouri National Guard
- Missouri State Highway Patrol
- Civil Air Patrol
- Missouri Voluntary Organizations Active in Disaster

4.2.3 Federal

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Health and Human Service
- U.S. Department of Homeland Security
- U.S. Department of Justice
- U.S. Department of Labor
- National Aeronautics and Space Administration
- U.S. Agency for International Development

Appendix D10 – ESF-10, Oil and Hazardous Materials Response

1.0 Situation

Saving and sustaining lives of Missouri residents and visitors in the immediate aftermath of a catastrophic earthquake is the highest priority for resource and logistics response operations. The joint state and federal effort involves deployment of hazardous material response teams to augment the State's local capabilities.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to support HAZMAT operations throughout the response phase in the immediate aftermath of a catastrophic earthquake on the New Madrid Fault in Missouri.

2.0 Mission

The Missouri Department of Natural Resources (MDNR), the Environmental Protection Agency (EPA), and other Emergency Support Function (ESF)-10 partners and stakeholders will provide HAZMAT augmentation to local organizations in order to save and sustain lives of Missouri residents and visitors immediately following a catastrophic earthquake.

3.0 Execution

State ESF-10 partners, in coordination with EPA and MDNR, will provide HAZMAT response within the impact zone. HAZMAT teams will be positioned to respond immediately after the earthquake according to priorities set by the UCG.

3.1 Concept of Logistics

- SEMA will serve as the lead state agency for providing logistics and forward staging area support for HAZMAT operations.
- FEMA will provide support by activating base camp contractors and mission assigning the USFS and DOD to provide additional support for establishing these facilities. Additional needs are as follows:
 - Transportation: air transport, pre-designated helispots and helibases, and forward staging areas
 - Airlift capabilities (moving the response personnel into the disaster area)
 - Heavy equipment to assist with access and demolition as needed
 - Safety monitoring
 - Access to the affected area.
- Missouri ESF-7 will establish designated staging areas which will serve as collection and dissemination points for all incoming state HAZMAT resources. The actual staging areas will be determined based on incident location.

Resources for responding to incidents involving HAZMAT in Missouri are listed in **Table D22**.

Table D22 HAZMAT Assets by Region

Type	Location	Number
HAZMAT Team Type I	Region D	1
	Region I	1
HAZMAT Team Type II	Region A	7
	Region B	1
	Region C	5
	Region D	3
	Region E	2
	Region F	4
	Region G	1
	Region H	1
	Region I	1
HAZMAT Team Type III	Region A	1
	Region I	2

The National Emergency Management Association developed the EMAC. EMAC identifies standard operating procedures (SOP) for requesting and sending interstate mutual aid when a state suffers or expects to suffer a major disaster and needs assistance from other states. During a catastrophic earthquake, the State of Missouri will need to request ESF-10 resources from other state governments through the EMAC system.

ESF-10 – Oil and Hazardous Materials Response provides for a coordinated response to oil and HAZMAT incidents by using the response mechanisms set forth in the National Oil and Hazardous Substances Pollution Contingency Plan. The EPA is the coordinating federal agency for ESF-10. Either EPA or the USCG serves as the primary agency for ESF-10 actions, depending upon whether the incident affects the inland or coastal zone (as defined in regional and area contingency plans). For incidents affecting both, EPA is the primary agency, and USCG serves as the deputy. EPA resources include:

- Federal On-Scene Coordinators who are authorized to initiate cleanup actions and commit federal funds.
- EPA Specials Teams, including the Environmental Response Team, National Decontamination Team, and Radiological Emergency Response Team, which provide specialized technical advice and assistance to responders.
- Emergency and Rapid Response Services and Superfund Technical Assessment and Response Team contracts.

According to the MAE Center, an estimated 3,040 facilities containing HAZMAT will sustain total damage. In addition, 354 natural gas facilities, 167 oil facilities, and 7,816 wastewater facilities will be completely destroyed with a high potential for HAZMAT release. The extensive pipeline infrastructure that exists in Missouri will sustain thousands of miles of damage, all of which poses natural gas, wastewater, oil, or anhydrous release. An estimated 11,842 wastewater leaks, 12,870 natural gas leaks, and 52 oil leaks will occur.

Private oil and natural gas company fire resources will respond to fires at their respective facilities. Additionally, as the Responsible Party for oil spills, oil companies will provide contractor resources for cleanup.

HAZMAT operations will be tasked out to available local, state, or federal resources on an as-needed basis. When assigning missions, HAZMAT releases that pose an immediate threat to life or public safety should be given priority over other releases.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The HAZMAT logistical purposes of this phase are to:

1. Estimate resources necessary to support HAZMAT operations.
2. Validate and establish supply chains for resources to support HAZMAT operations.

End State of Phase

A fully developed logistical framework can support HAZMAT priorities.

Local Mission-essential Tasks

Local Fire Chief or Local Emergency Management

1. Deploy local HAZMAT resources to the field to survey their communities and estimate the assets necessary to support HAZMAT incidents.
2. Coordinate local logistics through the LEOC.
3. Begin HAZMAT operations using what assets are available.
4. Utilize existing mutual aid agreements when local resources are exhausted.
5. Request additional assets through the LEOC to the SEOC.
6. Establish a method for logistical support of all HAZMAT responders in the area.
7. Coordinate resource requests with the SEOC and track allocated resources.

State Mission-essential Tasks

Missouri Department of Natural Resources

1. Coordinate state logistics through ESF-7, Logistics Section, at the SEOC.
2. Request additional HAZMAT assets using EMAC and state mutual aid agreements.
3. Request federal assets through the RRCC or JFO once state resources are exhausted.
4. Ensure the Logistics function is carried out in the SEOC. This function includes providing communication services and resource tracking; acquiring equipment, supplies, personnel,

facilities, and transportation services; and arranging for food, lodging, and other support services as required.

5. Establish the appropriate level of staffing within the Logistics Section of the SEOC, continuously monitoring the effectiveness of the organization and modifying as required.
6. Coordinate closely with the LEOCs to establish priorities for resource allocation to critical areas.
7. Keep State Leadership informed of all significant issues relating to the Logistics Section.
8. Coordinate with the SEMA, MONG, and other agencies to meet staging area requirements.
9. Coordinate with ESF-1 for transportation of assets into the affected area.

Federal Mission-essential Tasks

Environmental Protection Agency

1. Coordinate logistics support for federal HAZMAT assets through the RRCC or the JFO once established.
2. Coordinate mission assignments of DOD aerial assets into and out of the affected area.
3. Aggressively and proactively employ the concepts of the NIMS to maintain agility in adapting to changing conditions, in-theater, pursuant to the objectives of the JFO/JFO Coordination Group.
4. Maintain comprehensive situational awareness and visibility of the COP through constant, near real-time communications, coordination, synchronization, and collaboration capabilities reporting up to the RRCC.
5. Provide logistical support for deploying HAZMAT elements required, and coordinate with FEMA regarding use of ISBs/staging areas, transportation of resources, use of disaster fuel contracts, emergency meals, potable water, base camp services, supply and equipment resupply, and use of all national contracts and interagency agreements.

3.1.2 Phase 2b Deployment

Purpose of Phase

The primary purposes of this phase are to:

1. Procure resources necessary to support HAZMAT operations.
2. Activate specific sites to support HAZMAT operations.
3. Transport resources to support HAZMAT operations.

End State of Phase

Local, state and federal partners have implemented a fully active logistical framework to support HAZMAT operations.

Local Mission-essential Tasks

Local Fire Chief or Local Emergency Management

1. Utilize existing mutual aid agreements when local resources are exhausted.
2. Request additional assets from the LEOC to the SEOC.
3. Begin requesting logistical support from the SEOC as local resources are exhausted.

4. Prepare to receive resources to support HAZMAT operations.
5. Ensure the Logistics function is carried out in support of the LEOC. This function includes establishing logistics staging areas and points of distribution, providing communications services and resource tracking; acquiring equipment, supplies, personnel, facilities, and transportation services; and arranging for food, lodging, and other support services as required.
6. Establish the appropriate level of branch and/or unit staffing within the Logistics Section, continuously monitoring the effectiveness of the organization and modifying as required.
7. Coordinate closely with Incident Command and LEOC operations to establish priorities for resource allocation to activated Incident Commands within the affected area.
8. Keep the LEOC informed of all significant issues relating to the Logistics Section.

State Mission-essential Tasks

Missouri Department of Natural Resources

1. Request federal assets through the SEOC and JFO when state resources are exhausted.
2. Coordinate contracting requirements to support HAZMAT operations.
3. Maintain supply of aviation fuel, vehicle fuel, mechanical support, parts, crew rotation, tools, water, food, and other supplies to support operations.
4. Ensure objectives as stated in the IAP are accomplished within the Operational Period or within the estimated time frame.
5. Coordinate commercial transportation as required to move HAZMAT teams to selected locations in the State.
6. Coordinate resource requests with supporting state agencies. Establish communications with both the local government and Federal Government agencies. Track all allocated resources.

Federal Mission-essential Tasks

Environmental Protection Agency

1. Coordinate logistics support for federal HAZMAT assets through the RRCC or the JFO once established.
2. Establish the appropriate support logistics cadre within the Logistics Section to support state operations. Continuously monitor the effectiveness of the organization and modify as required.
3. Develop initial Logistical push packages focusing on lifesaving and life sustaining items first.
4. Provide both the personnel and equipment to establish onsite information management capabilities to communicate both internally with the JFO and externally with other incident response activities.
5. Coordinate resource requests with supporting federal agencies. Establish communications with both the local and state governments. Track all allocated resources.
6. Coordinate with FEMA Region VII to procure local materials and services if possible.
7. Develop and coordinate centralized ordering and shipping. Work with State Logistics to ensure delivery at appropriate distribution sites.
8. Establish appropriate push-pull distribution system.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

Develop a sustained supply chain to support HAZMAT operations through defined operational periods scaled as closely as possible to the needs of the incident.

End State of Phase

Implementation of sustainable operational periods is characterized by defined resource needs and a steady state of HAZMAT support.

Local Mission-essential Tasks

Local Fire Chief or Local Emergency Management

1. Request additional assets from the LEOC to the SEOC.
2. Ensure that transportation requirements in support of HAZMAT operations are met.
3. Ensure that all requests for facilities and facility support are addressed.

State Mission-essential Tasks

Missouri Department of Natural Resources

1. Ensure that transportation requirements are met.
2. Ensure that all requests for facilities and facility support are addressed.
3. Participate and provide input to the Demobilization Plan.

Federal Mission-essential Tasks

Environmental Protection Agency

1. Coordinate logistics support for federal HAZMAT assets through the JFO.
2. Ensure that transportation requirements are met, and ensure that all requests for facilities and facility support are addressed.
3. When federal ESF-10 resources have arrived, coordinate through the ESF-10 Lead at the JFO and the Operations Section Chief.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Fire Chief or Local Emergency Management

4.1.2 State

- Missouri Department of Natural Resources

4.1.3 Federal

- U.S. Environmental Protection Agency

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Public Health Authorities
- Local Public Works

4.2.2 State

- Missouri Department of Public Safety
- Missouri Department of Natural Resources
- Missouri State Highway Patrol
- Missouri State Water Patrol
- Missouri State Emergency Management Agency
- Missouri Department of Agriculture
- Missouri Department of Conservation
- Missouri Department of Health and Senior Services
- Missouri Department Transportation

4.2.3 Federal

- General Services Administration
- Nuclear Regulatory Commission
- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Energy
- U.S. Department of Health and Human Services
- U.S. Department of Homeland Security
- U.S. Department of the Interior
- U.S. Department of Justice
- U.S. Department of Labor
- U.S. Department of State
- U.S. Department of Transportation

Appendix D11 – ESF-11, Agriculture

1.0 Situation

Should a catastrophic earthquake occur in the NMSZ, it will quickly overwhelm local government resources and their capability to provide necessary services, leading to a disaster situation. An emergency of this magnitude will pose a threat to all facets of Missouri agriculture and will involve crops, agricultural wastes/discharge, nurseries, pesticides, orchards, animal feeds, animal welfare, injured/displaced animals, dead animals, public health, wild animals, natural resources, and other related issues.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics specific to ESF-11 – Agriculture and Natural Resources. Federal ESF-11 bulk feeding operations are addressed in ESF-6.

2.0 Mission

The Missouri Department of Agriculture (MDA), U.S. Department of Agriculture (USDA), U.S. Department of the Interior (DOI) and other ESF-11 partners and stakeholders will provide agricultural response augmentation to local organizations in order to address the agricultural effects in the impact zone immediately following a catastrophic earthquake.

3.0 Execution

State ESF-11 partners, in coordination with USDA and DOI, will provide agricultural response within the impact zone. Agriculture response teams will respond according to priorities set by the UCG.

3.1 Concept of Logistics

Each ESF-11 agency typically handles the logistical issues for its responders. However, it is sometimes necessary to obtain logistical support from SEMA and FEMA. The ESF-11 Coordinators in each FEMA region are designated Action Officers and can sign ARFs if needed to obtain assistance from FEMA or another federal agency. MDA will request additional resource support through the SEOC. MDA will submit EMAC requests to the EMAC A Team at the SEOC, and will make federal resource requests through the RRCC EMAC Coordinator.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The agriculture and natural resources logistical purposes of this phase are to:

1. Gather data pertinent to agriculture resources, food production facilities, food storage facilities, and natural resources to form a COP.
2. Estimate resources necessary to support agriculture and natural resources operations.
3. Validate and establish supply chains for resources to support agriculture and natural resource operations.

End State of Phase

The end state of this phase is development of a SITREP detailing the impact to farms, ranches, production facilities, food storage facilities and natural resources; and development of a logistical framework to support agriculture and natural resource priorities.

Local Mission-essential Tasks

Local Emergency Management

1. Coordinate logistics through the LEOC.
2. Request additional assets from the LEOC to the SEOC as needed.
3. Deploy staff to the field to survey communities to estimate the number of assets necessary to support agricultural issues that need to be addressed as a result of the earthquake.
4. Prepare to receive assets as they arrive in the affected area.

State Mission-essential Tasks

Missouri Department of Agriculture

1. Coordinate logistics through the SEOC.
2. Request additional assets through the SEOC using EMAC and state mutual aid agreements.
3. Request federal assets through the RRCC or the JFO when state resources are exhausted.
4. Coordinate closely with the LEOCs to establish priorities for resource allocation to critical areas.
5. Coordinate with SEMA logistics and other agencies to meet staging area requirements.
6. Coordinate with ESF-1 for transportation needs.

Federal Mission-essential Tasks

U.S. Department of Agriculture

1. Coordinate federal logistics through the RRCC and the JFO once established.
2. Coordinate mission assignments of aerial assets into and out of the affected area.
3. Begin pre-positioning resources at staging areas to prepare for deployment.

3.1.2 Phase 2b Deployment

Purpose of Phase

The primary agriculture and natural resources purposes of this phase are to:

1. Develop priorities and objectives for agricultural response.
2. Procure resources necessary to support agriculture and natural resources operations.
3. Transport resources to support agriculture and natural resources operations to staging.

End State of Phase

The logistical framework to support mass fatality operations is developed, objectives for agricultural response are added to the IAP, and resources begin to mobilize for agricultural response.

Local Mission-essential Tasks

Local Emergency Management

1. Utilize existing mutual aid agreements when local resources are exhausted.
2. Coordinate closely with Incident Command and the LEOC to establish priorities for resource allocation to activated Incident Commands within the affected area.

State Mission-essential Tasks

Missouri Department of Agriculture

1. Request federal assets through the JFO when state resources are exhausted.
2. Coordinate contracting requirements for all ESFs.
3. Ensure section objectives as stated in the IAP are accomplished within the operational period or within the estimated time frame.
4. Coordinate through the SEOC for commercial transportation and/or DOD mission assignments to acquire transportation assets as required to move agriculture response teams to selected locations in the State.
5. Activate state agricultural response teams and move into staging areas to prepare for deployment.

Federal Mission-essential Tasks

U.S. Department of Agriculture

1. Coordinate resource requests with supporting federal agencies.
2. Establish communications with both the local and state governments, and track all allocated resources.
3. Procure local materials and services if possible except for items managed by FEMA HQ.
4. Develop and coordinate centralized ordering and shipping.
5. Establish appropriate push-pull distribution system.
6. Continue to stage resources.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

Deploy agricultural resources into the affected area once ground access to the area has been established.

End State of Phase

The end state of this phase is assignment of ESF-11 missions to response resources to be deployed to the affected area.

Local Mission-essential Tasks

Local Emergency Management

1. Ensure that transportation requirements are met.
2. Ensure that all requests for facilities and facility support are addressed.

State Mission-essential Tasks

Missouri Department of Agriculture

1. Ensure that transportation requirements are met.
2. Ensure that all requests for facilities and facility support are coordinated with ESF-7.
3. Participate and provide input to the Demobilization Plan.
4. Deploy agricultural response teams.

Federal Mission-essential Tasks

U.S. Department of Agriculture

1. Ensure that transportation requirements in support of logistics operations are met, and ensure that all requests for facilities and facility support are addressed.
2. Deploy federal agricultural response teams.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Emergency Management

4.1.2 State

- Missouri Department of Agriculture

4.1.3 Federal

- U.S. Department of Agriculture
- U.S. Department of the Interior

4.2 Cooperating Agencies (Support)

4.2.1 Local

- None

4.2.2 State

- Missouri Office of the Governor
- Missouri Department of Conservation
- Missouri Department of Economic Development
- Missouri Department of Health and Senior Services
- Missouri Department of Social Services
- Missouri Department of Transportation
- Missouri Department of Mental Health
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri National Guard
- Missouri State Emergency Management Agency
- Missouri State Highway Patrol
- Missouri Water Patrol
- Missouri Voluntary Organizations Active in Disaster

4.2.3 Federal

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Energy
- U.S. Department of Health and Human Services
- U.S. Department of Homeland Security
- U.S. Department of the Interior
- U.S. Department of Justice
- U.S. Department of Labor
- U.S. Department of State
- U.S. Department of Transportation
- General Services Administration
- National Archives and Records Administration
- U.S. Postal Service
- Advisory Council on Historic Preservation
- American Red Cross
- Heritage Emergency National Task Force

Appendix D12 – ESF-12, Energy

1.0 Situation

Saving and sustaining lives of Missouri residents and visitors in the immediate aftermath of a catastrophic earthquake is the highest priority for resource and logistics response operations. The joint state and federal effort involves energy resources including: electrical generation, transmission, and distribution lines; electrical substations; petroleum product and natural gas pipelines, and pumping stations. Power restoration is essential to the recovery of the economic and industrial base for the State of Missouri. Restoration of power will enable businesses to reopen, the population to rebuild, and provide for a smooth transition to recovery. Most energy resources and coordination will be addressed within the local and private business community, with additional coordination, regulation, and oversight from local, state, and federal regulatory authorities.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to support restoration of CI/KR and public service in support of ESF-12 operations throughout the response phase during the immediate aftermath of a catastrophic earthquake in the NMSZ in Missouri.

2.0 Mission

Missouri Department of Natural Resources (MDNR) Energy Center, Missouri Public Services Commission (MPSC), U.S. Department of Energy (USDOE,) and other ESF-12 partners and stakeholders will provide augmentation to public and private energy organizations and their restoration operations immediately following a catastrophic earthquake.

3.0 Execution

The DOE with MDNR, MPSC, local municipalities, cooperatives, and private energy providers will provide energy support, assistance, and coordination in assessing power infrastructure damage and accessing emergency responder services in order to expedite power restoration and de-conflict power restoration priorities. MDNR's Energy Assurance Plan lists the priorities for allocation of power and fuel during a NMSZ incident. ESF-12 partners will respond immediately after the earthquake according to priorities set by the UCG.

3.1 Concept of Logistics

The Concept of Logistics defines the tasks necessary to support the deployment of assets to support ESF-12 operations within Missouri in response to a catastrophic earthquake.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The ESF-12 Energy logistical purposes of this phase are to:

1. Estimate resources necessary to support energy operations.
2. Validate and establish specific sites in need of energy support operations.
3. Validate and establish the process and priorities for resources to support ESF-12 operations.

Achieving these goals will provide the framework to support energy priorities and to set an initial course for deployment of support assets.

End State of Phase

The desired end state of this phase is a fully developed logistical framework to support ESF-12 Energy priorities.

Public/Private/Local Mission-essential Tasks

Public/Private and Local Energy Agencies

1. Evaluate impact on local systems, gain situational awareness, and identify needs.
2. Led by energy resource owners, initiate rapid restoration of infrastructure-related services after an incident occurs, and assess the logistical support and resources required to re-establish ESF-12 infrastructure.
3. When appropriate, integrate private-sector entities into ESF-12 planning and decision-making processes to establish priorities and to foster efficient use of resources.
4. Coordinate with investor-owned utilities and private-sector owners of the energy infrastructure in impacted areas to identify necessary resources and logistical support.
5. Initiate coordination with all suppliers, energy support systems, and ESF-12 logistic support teams.

State Mission-essential Tasks

State Emergency Management Agency

1. Maintain communications with the NRC, nuclear facilities, MPSC, and the MDNR Energy Center in responding to and recovering from radiological nuclear power plant emergencies, and identify real and potential assets required to accomplish this task.
2. Coordinate with the ARC and LEOCs to identify their emergency power generation needs.

Missouri Department of Natural Resources

1. Following a 6.5-magnitude or greater earthquake impacting Missouri, the state ESF-12 Lead will be alerted using the Missouri Emergency Notification System. The state ESF-12 Lead will notify the 24-hour DOE EOC. MDNR will self-activate if made aware of the situation from other resources.
2. Notify the appropriate person/personnel at the Energy Center to activate and respond to the SEOC and identify the response requirements.
3. Deploy designated representatives or duly appointed alternates to the SEOC at the SEMA.
4. Establish work assignments and schedules, consistent with the State of Missouri Energy Assurance Plan.
5. Through the Energy Center, staff the SEOC.
6. Coordinate reconnaissance and assessment with the use of air and ground reports from any source identifying resources required to restore energy systems.
7. Obtain information from state and local emergency response/damage assessment teams deployed to the disaster areas to determine possible affected areas, industries, and resources needed for energy restoration.
8. Ensure timely gathering and dissemination of accurate information during the energy shortage and energy gaps evaluating logistical support for resources.

9. Contact the ESF-12 state, local, regulated, and non-regulated public/private industry partners, and obtain situational awareness and resource requirements. Partners include:
 - a. MoDOT Office of Pipeline Safety.
 - b. Missouri Public Utility Authority (MPUA).
 - c. Mid-West Independent Transmission System Operators / Regional Transmission Organization.
 - d. Regulated partners through the MPSC.
 - e. Non-regulated partners through the MDNR.
 - f. MSHP.
10. Contact electric companies, natural gas companies, nuclear-based electric generation plants(Union Electric Company), cooperatives, propane terminals and retailers, and transportation fuel providers serving the affected area to obtain information about damage and assistance needed in their areas of operation.
11. Maintain communications with private-sector providers of other energy and transportation fuels, SEMA, the MPSC, and other ESF-12 support agencies and organizations in responding to and recovering from emergencies regarding shortages and disruptions in the supply of other private-sector energy and transportation fuels affecting the public.
12. Monitor the procedures followed by individual utilities during energy generating capacity shortages to ensure statewide action and communication, and identification of shortages.
13. Coordinate and establish priorities based upon life safety and CI/KR and systems priority issues. The identification process will begin by locating distribution sites, staging areas, and storage facilities with the following priority criteria in mind:
 - a. First responders.
 - b. Essential medical operations.
 - c. Public water and sanitation.
 - d. Shelters.
 - e. PODs.
 - f. Commercial food and fuel operations.
 - g. Commercial telecommunications nodes.
 - h. Critical government facilities.
14. Establish:
 - a. Delivery routes and methods.
 - b. Locations of fuel and energy resources.
 - c. Resources necessary to establish and maintain operations.

Missouri Public Services Commission

1. Contact the ESF-12 regulated public/private partners, obtain situational awareness, and determine resource needs.

2. Notify or begin communication, dissemination, and coordination with other ESF-12 support agencies immediately and as appropriate to identify resource needs and shortages, including:
 - a. Regulated providers.
 - b. Unregulated providers.
 - c. Federal partners.
3. Determine Missouri's generating capacity, expected peak loads, expected duration of emergency incident, explanation of utilities' actions, and recommendations of state and local actions in support of the utilities.
4. Maintain MPSC communications with electric utilities, SEMA, and other support agencies and organizations in responding to and recovering from emergencies regarding electric generating capacity shortages, electric generating fuel shortages, transmission and distribution line outages, and electrical service outages affecting the public.
5. Through the MPSC, coordinate information and requests for assistance with the following private-sector entities:
 - a. The electricity and the oil and natural gas sector coordinating councils.
 - b. The Electric Reliability Organization and various associations that represent portions of the energy sector.

Federal Mission-essential Tasks

U. S. Department of Energy

1. Activate pre-existing FEMA Mission Assignment documents for a 6.5-magnitude earthquake incident.
2. Act as the federal coordinating agency for ESF-12, and as the primary agency for providing resources at the RRCC and JFO.
3. Assist industry and government with requests for emergency response actions required to meet energy sector demands.
4. Analyze impacts to the national infrastructure and communicate this to DOE-HQ senior management identifying resource shortages.
5. Analyze and report on interdependency issues that may arise as these apply to all affected regions.
6. Provide technical assistance, coordination of transportation resources, support at responder camps, and priority handling of ESF-12 cargo in order to support restoration of the power grid, as determined by the UCG.

3.1.2 Phase 2b Deployment

Purpose of Phase

To establish a comprehensive, functional, integrated response identifying CI/KR, public service, and critical system restoration based upon potential loss of life, life safety, and number of CI/KRs impacted.

End State of Phase

The desired end state of this phase is a fully active logistical framework to support ESF-12 Energy operations.

Public, Private, Local Mission-essential Tasks

Public/Private and Local Energy Agencies

1. Coordinate with the Investor Owned Utilities, Municipal Utilities, cooperatives, Bulk Distribution Terminals, and the private sector owners of the energy infrastructure in the affected area, and determine needed resources.
2. Integrate private-sector entities into ESF-12 response planning and decision-making processes at the EOC, and ensure energy resource owners take the lead in rapid restoration of infrastructure-related services after an incident occurs, and identify needed resources.
3. Coordinate through the Business Emergency Operations Center (BEOC), if activated, to provide technical assistance and to assist in determination of priorities and support if needed.
4. Ensure that Ameren UE's "auto-push" information is provided to MDNR and anticipated shortfalls.
5. Continue to provide situation updates, assessments, and information dissemination. Calculate and convey all resource shortfalls and estimated local impacts, assessing the need for additional assets, and request them from the SEOC.

State Mission-essential Tasks

Missouri Public Services Commission

1. Facilitate any issues that are encountered and resources that are needed, and assist with the timely and effective restoration of power.
2. Identify the need to have and establish effective internal/external communications by use of:
 - a. Cell phones (some personal), pagers, and satellite communication capabilities.
 - b. Comprehensive internal and external communications to Private/Public Partners in the field.
 - c. Regulated and unregulated partner representatives present in the SEOC for direct communication and coordination.
 - d. A 24-hour emergency hotline to contact all the public and private partners.
3. Obtain and coordinate situational awareness reports from private, local, and state field resources, and continually identify resource shortfalls.
4. Activate EMAC. EMAC contracts are developed and established through the Energy Assurance Association (EAA), National Association of State Energy Officials, and tie into the EEA Coordinators within each state.
5. Submit ARFs for FEMA Mission Assignments.
6. Submit requests for assistance, and bring in supporting equipment from pre-identified teams and partners from within the State for resource management.
7. Reestablish/establish the generation and transmission plants (6) that supply power to 41 cooperatives in the State.
8. Respond to specific energy shortage conditions and assist in restoring equilibrium of supply as expeditiously as possible.

9. Activate specific responses designed to restrain demand and manage energy supply, particularly responses that rely on voluntary participation and conserve resources, and continue to ensure provision of energy to essential services.
10. Establish appropriate legal authority to direct and respond to energy shortfalls.

Federal Mission-essential Tasks

U. S. Department of Energy

1. Issue federal mission assignments to accomplish response operations in support of state-requested ARFs and requests for assistance (ReqAs), and/or to support state/federal operations.
2. Contact the ESF-12 team by either using the ESF response lists or the Telephone Notification System (TNS), and establish personnel requirements.
3. Ensure the U. S. Secretary of Energy restricts fuel use and limits flow as needed, and support logistical requirements.
4. Using TNS or an e-mail, request the cadre of ESF-12 responders to notify the Emergency Response Organization Director of their availability.
5. Send deployment orders and a deployment schedule on a daily basis when the ESF-12 team is activated.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

The purpose of this phase is to develop a sustained supply chain to support ESF-12 Energy operations through defined operational periods, scaled as closely as possible to the needs of the incident.

End State of Phase

The overall strategy is to deploy appropriately local, state, and federal energy assets including equipment and personnel to support ESF-12, and have in place a comprehensive process for complete restoration of most systems and successful re-establishment of as many systems as possible.

Public/Private and Local Mission-essential Tasks

Public/Private and Local Energy Agencies

1. Continue assessment and formulation of strategy for furnishing resources needed to continue short-term restoration and achieve long-term solutions.
2. Support sustainment of energy infrastructure as a pivotal requirement with many systems being compromised. This action will be private-sector driven, and will require logistical support for resources.
3. Identify the need and arrange for individual generation and power routing for the cooperatives and Municipals.
4. Establish priorities for refueling electrical and natural gas supply and resources.
5. Establish a process for personnel and personal support involving supply of basic needs and creation of tours of duty.

State Mission-essential Tasks

Missouri Department of Natural Resources

1. Review recovery actions to identify logistical and resource requirements necessary to develop strategies for meeting local and state energy needs. This includes consideration and implementation of sustainable (re)development strategies and actions to make Missouri communities less susceptible to future disasters.
2. Communicate with state, local, utility, and energy suppliers regarding response actions, resource needs, and logistic considerations, and monitor those actions and needs.
3. Receive and assess requests for aid from local, state, and federal agencies; other energy offices; energy suppliers; and distributors.
4. Maintain communication with utility, fuel, and other energy representatives to determine response recovery and resource needs, and logistical support.

Missouri Public Services Commission

1. Coordinate information and requests for assistance with the electricity, oil, and natural gas sector coordinating councils; the National Electric Reliability Council (NERC), and various associations that represent portions of the energy sector.
2. Evaluate potential statewide implications of resource and logistical requirements and resolutions.
3. Continue to determine energy issues and identify resource requirements to ensure timely restoration of critical energy systems.
4. Initiate and continue to issue permit and fee waivers and the resources necessary to facilitate this process.
5. Continue oversight of critical, temporary, functional, and operational repairs. Begin/continue assessment of resources and logistical support for long-term recovery and systems restoration and sustainment.
6. Maintain communication with utility, fuel, and other energy representatives to determine response and recovery needs.
7. Determine Missouri's generating capacity, expected peak loads, and expected duration of the emergency incident; identify utilities' emergency response actions, and formulate recommendations for state and local actions in support of the utilities.

Federal Mission-essential Tasks

U. S. Department of Energy

1. Analyze impacts to the national infrastructure and communicate this to DOE-HQ senior management advising of logistical support and requirements.
2. Analyze and report on interdependency issues that may arise as these apply to all affected regions and resource impacts and requirements.
3. Assist industry and government with requests for emergency response actions required to meet energy sector demands.
4. Monitor the status of active mission assignments, and continue to accept mission assignments based on capacity
5. Maintain staffing per FEMA requirements for the activated response center, and calculate necessary personnel and support required.

6. Continue assessment for long-term recovery and systems restoration and sustainment requirements.
7. Coordinate with ESF-15 External Affairs to appropriately disseminate emergency public information

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Private/Local

- Municipal utilities
- Mid-West Independent Transmission System Operators (MISO)/Regional Transmission Organization (RTO)
- Entergy (RTO)
- Regulated partners through the Public Services Commission (PSC)
- Non-regulated partners through the MDNR
- Rural Electric Cooperative
- Citizen's Electric Cooperation

4.1.2 Local

- Missouri Public Utility Authority (MPUA)
- Other Municipals

4.1.3 State

- Missouri Department of Natural Resources—Energy Center
- Missouri Public Services Commission

4.1.4 Federal

- U.S. Department of Energy

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Incident command
- Local Public Works

4.2.2 State

- Missouri Department of Transportation
- Missouri Department of Economic Development
- Missouri National Guard
- Missouri Department of Transportation (MODOT) Office of Pipeline Safety
- Missouri Department of Natural Resources

- State Emergency Management Agency

4.2.3 Federal

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Homeland Security
- U.S. Department of the Interior
- U.S. Department of Labor
- U.S. Department of State
- U.S. Department of Transportation
- Environmental Protection Agency
- Nuclear Regulatory Commission
- Tennessee Valley Authority

Appendix D13 – ESF-13, Public Safety

1.0 Situation

Providing robust security for victims and first responders in the immediate aftermath of a catastrophic earthquake is vital to restoring order and to allow critical response measures to proceed safely. Coordination of local, state, and federal agencies along with private sector partners to support safe and secure response operations will provide responders and victims the confidence to proceed with necessary measures to support incident recovery.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to provide security for the general population and first responders throughout the response phase in the immediate aftermath of a catastrophic earthquake on the New Madrid Fault in Missouri.

2.0 Mission

The Missouri State Highway Patrol (MSHP), Missouri National Guard (MONG), the U.S. Department of Defense (DOD), and other Emergency Support Function (ESF)-13 partners and stakeholders will provide security/law enforcement resources to support local jurisdictions immediately following a catastrophic earthquake.

3.0 Execution

MSHP and ESF-13 partners, will provide security/law enforcement support within the impact zone. State and federal security/law enforcement teams will be positioned to respond immediately after the earthquake according to priorities set by the UCG.

3.1 Concept of Logistics

The Concept of Logistics defines tasks necessary to support deployment of security/law enforcement resources to support ESF-13 operations within Missouri in response to a catastrophic earthquake.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The damage and safety assessment logistical purposes of this phase are to:

1. Estimate resources necessary to support security/public safety.
2. Validate and establish specific sites to support security/public safety.
3. Validate and establish supply chains for resources to support security/public safety.

Achieving these goals will provide the framework to support security/public safety priorities and to set an initial course for deployment of assets.

End State of Phase

The desired end state of this phase is a fully developed logistical framework to support security/public safety priorities.

Local Mission-essential Tasks

Local Law Enforcement (Police/Sheriffs)

1. Deploy staff to the field to assist in security of key government facilities, communications systems, and other government assets; and to assess damage and list assets necessary to support issues that need to be addressed as a result of the earthquake.
2. Provide public safety services for the jurisdiction as able.

State Mission-essential Tasks

Missouri State Highway Patrol

1. In coordination with federal ESF-13, determine needs and evaluate the impact of the earthquake on government and private-sector critical assets, and assess resource needs. Based on that evaluation, if necessary, request federal ESF-13 resources.
2. After initial assessment and in consultation with SEMA, determine if assistance is needed either through EMAC or through federal ESF-13 resources, and make appropriate contacts to request EMAC and federal resources.
3. After consulting with local government and private-sector representatives, determine what type of additional assistance is needed either through EMAC or federal ESF-13 resources.

Missouri National Guard

Coordinate with other agencies to meet staging area requirements.

State Emergency Management Agency

Process all requests for assistance via state, EMAC, and/or federal ESF-13 resources. ESF-13 will process resource requests and coordinate resourcing, storage, staging, and transportation with ESF-7.

Federal Mission-essential Tasks

U.S. Department of Justice

1. Deploy a federal ESF-13 liaison to the JFO, and make contact with the SEOC to coordinate federal resource support to the State.
2. Activate the federal ESF-13 Incident Response Coordination Team to support resourcing needs for security/public safety operations.
3. In conjunction with the SEOC, assess the need for security/public safety support.
4. Consider and process requests for resources as soon as possible.
5. Provide logistical support for deploying damage and safety assessment elements required and coordinate use of ISBs/staging areas, transportation of resources, and use of all national contracts and interagency agreements managed by DHS for response operations.

3.1.2 Phase 2b Deployment

Purpose of Phase

The primary security/public safety purposes of this phase are to:

1. Procure resources necessary to support security/public safety operations.
2. Activate specific sites to support security/public safety operations.
3. Transport resources to support security/public safety operations.

Achieving these goals will provide physical support for security/public safety priorities and serve as the starting point for operations.

End State of Phase

The desired end state of this phase is a fully active logistical framework to support security/public safety assessment operations.

Local Mission-essential Tasks

Local Law Enforcement (Police/Sheriffs)

1. In consultation with state, federal, and private-sector agencies, support movement of resources to staging areas/warehouses as needed and able.
2. Receive resources to support security/public safety operations within the impact zone.

State Mission-essential Tasks

Missouri State Highway Patrol

1. In association with federal ESF-13, request security/public safety resources via EMAC or federal resources as needed to deploy to the area affected by the earthquake.
2. Coordinate security/public safety logistics support with state ESF-7 and FEMA Logistics.

Federal Mission-essential Tasks

U.S. Department of Justice

1. Use structures and processes described in the NIMS to sustain ESF-13 deployed assets.
2. Provide support and facilities management at FEMA-managed sites such as the JFO, Distribution Center, ISBs, and base camps.
3. In consultation with MSHP, determine the need for additional security/public safety resources.

U.S. Department of Defense

Provide available logistical support to security/public safety operations.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

The purpose of this phase is to develop a sustained supply chain to support security/public safety operations through defined operational periods, scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is identified by sustainable operational periods characterized by defined resource needs and a steady state of emergency support.

Local Mission-essential Tasks

Local Law Enforcement (Police/Sheriffs)

1. Continue to deploy staff to the field and to the LEOC to support security needs.
2. Continuously survey emergency communications to determine communications issues that need to be addressed. Each emergency communication damage assessment team will report its findings to the LEOC and the SEOC.

Local Public Works/Transportation Departments

Local public works and transportation departments will support movement of resources and other large support equipment as able.

State Mission-essential Tasks

Missouri State Highway Patrol

1. Continue to deploy available security/public safety resources to areas where they are most needed.
2. Continue to evaluate situational reports and adjust resources as needed

Federal Mission-essential Tasks

U.S. Department of Justice

1. After establishment of the JFO, submit requests through the FCO or Operations Section Chief to the ESF-13 Lead. The ESF-13 Lead will be in close communication with the federal Assistant Secretary for Preparedness and Response for approval and identification of the resources that will be provided. The federal ESF-13 Lead will work directly with the state ESF-13 Lead to ensure the State's needs are being met.
2. When federal ESF-13 resources have arrived, coordinate deployment at the federal level through the ESF-13 Lead at the JFO and the Operations Section Chief.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local law enforcement including police and sheriff's departments

4.1.2 State

- Missouri State Highway Patrol

4.1.3 Federal

- U.S. Department of Justice

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Law Enforcement
- Local Fire Department
- Local Emergency Medical
- Non-governmental Agencies
- Community Emergency Response Team

4.2.2 State

- Missouri Department of Conservation
- Missouri Department of Corrections

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- Missouri Department of Transportation
- Missouri Department of Natural Resources
- Missouri Department of Public Safety
- Missouri State Water Patrol
- Missouri National Guard
- Civil Air Patrol
- Missouri Voluntary Organizations Active in Disaster

4.2.3 Federal

- All Federal departments and agencies possessing a public safety and security capability

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Appendix D14 – ESF-14, Long Term Recovery

Long-term recovery has no applicable logistical needs during Phase 2, Response.

Appendix D15 – ESF-15, Public Affairs

1.0 Situation

Saving and sustaining lives and property of Missouri residents and visitors in the immediate aftermath of a catastrophic earthquake is the highest priority for resource and logistics response operations. The joint state and federal effort involves deployment and dissemination of emergency public information and warning assets to augment the State's local response capabilities.

1.1 Purpose

The purpose of this Appendix is to define the Concept of Logistics to support the dissemination of emergency public information and warning operations throughout the response phase in the immediate aftermath of a catastrophic earthquake on the New Madrid Fault in Missouri.

2.0 Mission

This Appendix provides the necessary coordination measures to prepare and deliver public safety information, and to respond to the media, elected officials, and other key stakeholders in order to reduce loss of life, prevent human suffering, and reduce property loss following a catastrophic earthquake in the NMSZ through ESF-15.

3.0 Execution

The State External Affairs ESF-15 partners in coordination with FEMA External Affairs will provide appropriate dissemination of emergency public information and warning in consultation with the Unified Coordination Group (UCG).

3.1 Concept of Logistics

The Concept of Logistics defines tasks necessary to support deployment of personnel and assets to support the dissemination of emergency public information and warning operations within Missouri in response to a catastrophic earthquake.

3.1.1 Phase 2a Activation/Immediate Response

Purpose of Phase

The logistical purposes of this phase are to:

1. Estimate the personnel resources necessary to support dissemination of emergency public information and warning operations.
2. Establish adequate and specific delivery methods for dissemination of emergency public information and warning operations.

End State of Phase

The desired end state of this phase is a fully developed logistical framework to support dissemination of emergency public information and warnings.

Local Mission-essential Tasks

Local Incident Command/Communications Officers

1. Coordinate with local affected areas, state, and federal authorities for situational awareness and common messaging.

2. Request adequate resources to prepare and disseminate material and information, and to deliver warnings, notices, and messages to the impacted population.

State Mission-essential Tasks

Governor's Office of Media Relations/Missouri Department of Public Safety

1. Prioritize life safety information and messages delivered through local, state, and national mass media resources including radio, television, internet, mass area notification (reverse 911), 211, amateur radio operators, social media, and door to door as needed.
2. Through the MDPS Public Information Officer (PIO), contact state-level PIOs before the JIC is officially activated to coordinate responses, provide situational awareness, and evaluate resources, staffing, and logistics needs.
3. Within the SEOC, activate an external affairs component that will automatically deploy Communication Directors/PIOs or duly appointed alternates to the SEOC and Joint Information System (JIS)/JIC at SEMA.
4. Evaluate functional/non-functional systems, and test traditional and non-traditional distribution methods.
5. Determine viability of local media in impacted areas.
6. Through the JIC Coordinator, establish work assignments, schedules, and staffing needs for the JIC.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Upon notification of the occurrence of a NMSZ incident meeting Region VII activation thresholds (refer to Section 3.2.1 of the Base Plan), the Region VII External Affairs Officer will be alerted using the Emergency Notification System initiated by RRCC leadership.
2. Numbers and qualification levels of resources will be determined by the staffing levels set by FEMA Region VII and the anticipated need identified by the External Affairs Officer.

3.1.2 Phase 2b Deployment

Purpose of Phase

The primary purposes of this phase are to:

1. Procure resources necessary to support the operations.
2. Activate specific sites and locations to support operations.
3. Communicate, deliver, and transport resources to support dissemination of emergency public information and warning operations.

Achieving these goals will provide physical support for priorities and serve as the starting point for operations.

End State of Phase

The desired end state of this phase is a fully active logistical framework to support dissemination of emergency public information and warning operations.

Local Mission-essential Tasks

Local Incident Command/Communications Officers

1. Assess the need for additional assets and request them from the JIC or JIS.
2. Calculate and convey all information dissemination and resource shortfalls.
3. Continue to provide situation updates, assessments, and information dissemination to available local media outlets.

State Mission-essential Tasks

Governor's Office Media Relations/Missouri Department of Public Safety

1. Evaluate and establish effective internal/external communications by use of cell phones, satellite communication capabilities, email, fax, web site, internet, twitter, and media: electronic and printed, wire service, Emergency Broadcast System, 211, etc.
2. Obtain situational awareness reports from local and state field resources, and evaluate shortfalls and required resources.
3. Activate EMAC requests and submit to the EMAC A Team at the SEOC.
4. Submit ARFs for FEMA mission assignments.
5. Evaluate methods of providing life safety emergency public information (pre-scripted and spontaneous) to the general population.
6. Coordinate with all response organization PIOs (including public, private, local, state, and federal) for information continuity and resource needs.
7. Evaluate the need for and ability to coordinate special requirements and consideration for sense-impaired groups, individuals with functional needs disabilities, and persons with limited or no English speaking proficiency, etc.
8. Conduct media monitoring and evaluate the need for logistical support and additional resources.
9. Coordinate additional resource requests with ESF-7.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Provide assistance with media monitoring, initiate and utilize pre-established protocols, coordinate with the IMAT, and evaluate the need for additional resources.
2. Deploy IMAT within the first 12 hours. FEMA IMAT response will be to the State first, and then to Branches and/or Divisions.
3. Provide technical assistance and coordinate message delivery and staffing at designated operational locations including the JFO, base camps, staging areas, PODs, or other locations as needed.
4. Respond to areas where the media has located, and assess the need for additional staff and resources.
5. Locate PIOs at key evacuation points, commodity sites, staging areas, and wherever there are people, reporters, and dignitaries causing a need for external affairs personnel and resources.

3.1.3 Phase 2c Employment/Sustained Response

Purpose of Phase

The purpose of this phase is to develop a sustained media operation through defined operational periods, scaled as closely as possible to the needs of the incident.

End State of Phase

The end state of this phase is identified by sustainable operational periods characterized by defined resource needs and a steady state of continuous support.

Local Mission-essential Tasks

Local Incident Command/Communications Officers

Continue assessments, acquisition, dissemination, and local coordination of local emergency public information, shortfalls, and required resources as able.

State Mission-essential Tasks

Governor's Office Media Relations/Missouri Department of Public Safety

1. Fill personnel gaps with permanent full-time employees, and rotate personnel using support from state and local sources.
2. Develop relationships and coordinate support with PIOs from other state and federal agencies.
3. Continue the EMAC and federal Mission Assignment/ REC As.
4. Create a database of available PIOs from public/private sector for resources and support to sustain operations.
5. Re-establish or create local public communication resources (print, audio, video, etc.) for information sharing and dissemination.

Federal Mission-essential Tasks

U.S. Department of Homeland Security/Federal Emergency Management Agency

1. Deploy federal communication assets for dissemination of emergency public information and warning, including equipment and personnel, and evaluate needs for resource and logistical shortfalls.
2. Monitor the status of active mission assignments, continue to accept mission assignments based on capacity, and determine resources required to meet needs.
3. Use broadcast production cameras, still cameras, laptops, and software—a part of the “push package” provided to FEMA Region VII by FEMA HQ External Affairs—for social networking and public information.
4. Obtain necessary resources and logistics to print and distribute large quantities of tele-registration flyers within the first 96 hours of a catastrophic incident to enhance Community Relations.
5. Supplement existing state and local communications resources to provide lifesaving emergency public information to minimize suffering during the initial response. Note: additional communications assets may be required as well.
6. Monitor all local and national news to compile clips and identify misinformation.

4.0 Oversight, Coordination and Communication

4.1 Coordinating Agencies (Primary)

4.1.1 Local

- Local Incident Command/Communications Officers

4.1.2 State

- Governor's Office Media Relations/Missouri Department of Public Safety
- Missouri Department of Public Safety, Communication Director's Office
- Missouri State Emergency Management Agency

4.1.3 Federal

- U.S. Department of Homeland Security/Federal Emergency Management Agency

4.2 Cooperating Agencies (Support)

4.2.1 Local

- Local Government
- Local Public Safety
- Local Emergency Management

4.2.2 State

- Missouri Department of Agriculture
- Missouri Attorney General's Office
- Missouri Department of Social Services
- Missouri Department of Transportation
- Missouri Department of Labor and Industrial Relations
- Missouri Department of Mental Health
- Missouri Department of Natural Resources
- Missouri Department of Economic Development
- Missouri National Guard
- Missouri Division of Fire Safety
- Missouri State Water Patrol
- Missouri State Highway Patrol
- Missouri Department of Health and Senior Services

4.2.3 Federal

- All other responding federal agencies

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Annex D – Logistics Management and Resource Support

Joint Missouri & Region VII Response
Operations Plan

Appendix D16 – ESF-16, Military Support

Logistics for Military Support is addressed in the MONG's Cracked Earth Plan. DOD assets will receive logistics support from the designated Base Support Installation.

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

Annex E, Air Operations

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 - INTERIM

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1.0 Situation

This *New Madrid Seismic Zone Earthquake– Joint State of Missouri & Region VII Air Operations Plan* (OPLAN) is designed to provide a realistic, feasible and flexible plan for conducting air operations following an all hazards event to include a major New Madrid Seismic Zone (NMSZ) earthquake. It is meant to be used in conjunction with the *New Madrid Seismic Zone Earthquake– Joint State of Missouri & Region VII Response Operations Plan*.

1.1 Purpose

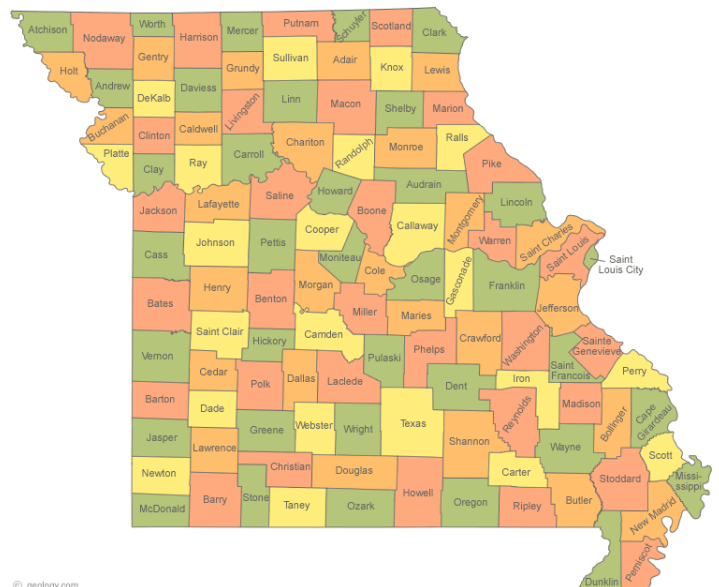
The primary purpose of the OPLAN is to provide guidance to integrate Federal, State and commercial aviation assets (for future reference air assets will refer to both fixed and rotary wing aircraft) as requested by a State or local agency in their response to a disaster or emergency. The Joint and State Air Operations Branches have a minimal role in the command and control of actual aviation resources (for future reference “aviation resources” refers to ground support, air crews and aviation assets). The JAOB will be located at the Joint Field Office (JFO) or Initial Operating Facility (IOF) and be primarily staffed by Federal personnel managing Federal air resources in support of the State of Missouri. The State Air Operations Branch (SAOB) will be located within the Missouri National Guard’s Joint Operations Center and will be staffed by State personnel managing State resources. Procedures outlined in this plan should be used in conjunction with other established Federal or State aviation plans. The objective is to ensure the availability and effective use of aviation resources in support of operations during a NMSZ response in Missouri. This will be accomplished by providing adequate organization at the region, State, local, and tribal levels to accept missions, assign priorities, allocate aircraft and resources, and direct activities consistent with other available modes of transportation. Such organization must function within the framework of applicable rules and regulations promulgated by United States Department of Transportation (USDOT), Federal Aviation Administration (FAA), Department of Defense (DoD), Federal Emergency Management Agency (FEMA), Federal Communications Commission (FCC), Missouri State Emergency Management Agency (SEMA), other Federal and State agencies.

This Plan outlines basic organizational structures and operating procedures to assist personnel assigned to the JAOB or the SAOB coordinate aviation operations within Missouri. It will amplify the guidance and information in the JFO, State Emergency Operations Center (SEOC), JOC and National Incident Management System (NIMS) manuals.

The JAOB and SAOB are intended to provide a unified planning and operations mechanism that integrates aviation resources for missions carried out by Federal, State, and local agencies participating in the response efforts. This role is enabled by a number of key functions including:

1. Aviation Mission Priorities
2. Aviation Mission Sets
3. Region VII Aviation Construct
4. Region VII Concept of Operations

Figure 1 Missouri County Overview



5. Region VII Points of Contact
6. Region VII Aviation Resources
7. Key Region VII Aviation Agencies and Contact Information
8. Primary and Secondary Airport information
9. EMAC Aviation Agreements between NMSZ States
10. Anticipated level of Federal Aviation Support

1.2 Background

Based on Hazards United States-Multi Hazards (HAZUS-MH) earthquake modeling and historical evidence, it is anticipated an earthquake within the NMSZ will be a catastrophic incident. Major critical infrastructure concerns include transportation, evacuation routes, communications, and the power grid. Entering and leaving the area will be impeded, which will significantly decrease response times. Aviation is going to play a critical role during response operations to the NMSZ. The immediate aviation response priorities will include damage assessment, search and rescue, aero-medical evacuation of casualties, and the rapid inbound flow of responders and commodities. While a NMSZ earthquake will primarily impact eight states and four FEMA Regions, widespread catastrophic damage will have far reaching effects involving the entire nation.

Immediately following a catastrophic NMSZ earthquake, ground and rail transportation may be unusable until repaired or inspected. In this incident, a large area encompassing 46 counties and over 1,113,695 people in southeastern Missouri would be effectively cut off from regional, State and Federal responders and recovery resources except by air. A well planned, coordinated

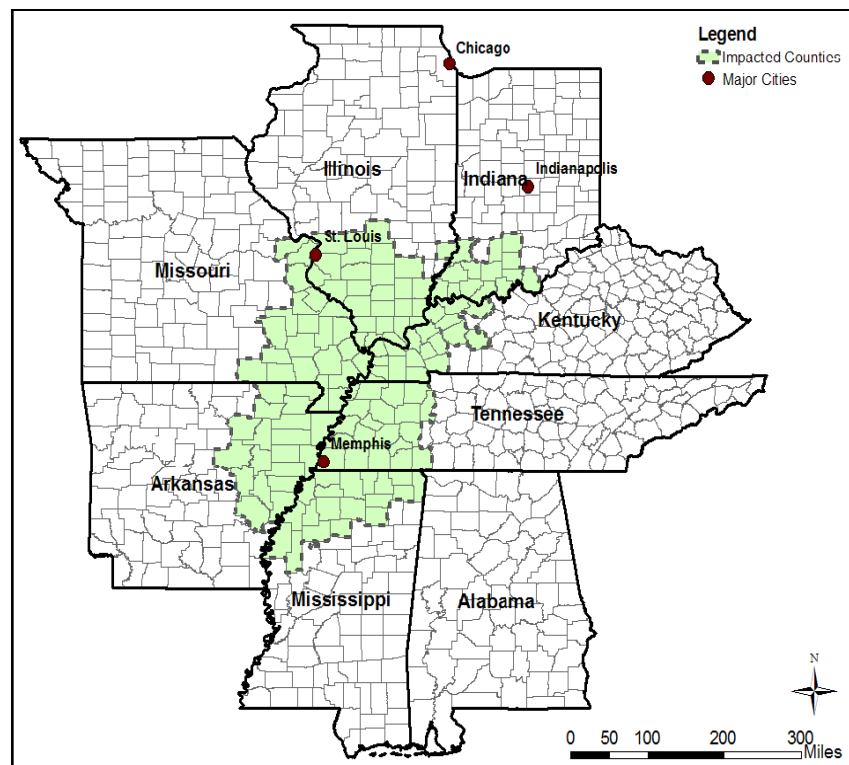
and agreed upon plan for air operations prior to an earthquake should allow available air assets to be effectively and efficiently used during the immediate response.

Aviation assets are a highly specialized resource that are both limited in availability and extremely valuable during a disaster response. Aviation resources have the distinct advantages of speed, an aerial perspective, and an ability to fly over impassable surface transportation infrastructure. These advantages must be weighed against the high cost and increased risk exposure inherent in aircraft use.

Congress established the National Earthquake Hazards Reduction Program (NEHRP)

State of Missouri

Figure 2 New Madrid Seismic Zone Fault Line



FEMA Region VII

by Public Law (PL) 95-124, *Earthquake Hazards Reduction Act* in 1977 as a long-term, nationwide program to reduce the risks to life and property in the he United States resulting from earthquakes.

Earthquakes strike suddenly, violently, and without warning. The scientific community has evidence that large earthquakes comparable to the 1811-1812 New Madrid events occurred multiple times in the past. These earthquakes are estimated to have occurred around 900 AD, 1400 AD, and again during the famous series of earthquakes of 1811-1812.

Eight earthquake source zones are in the central United States, two of which are in the State of Missouri. The most active zone is the NMSZ, extending 150 miles northeast Arkansas through southeast Missouri and western Tennessee and Kentucky to the Illinois side of the Ohio River Valley. It crosses the Mississippi River in at least three places and the Ohio River in at least two places. It consists of a series of faults 15 miles beneath the continental crust in a weak spot known as Reelfoot Rift. Other zones also affect Missourians because of their close proximity. These are the Wabash Valley Fault, Illinois Basin, and the Nemaha Uplift. The Nemaha Uplift concerns Missourians because it runs parallel to the Missouri-Kansas border from Lincoln, Nebraska to Oklahoma City, Oklahoma. Its earthquakes are not as severe as those in the historic NMSZ but several have affected Missouri in the past.

The hazard in this region is as high as for places in California, despite a lower level of modern-day earthquake activity. Scientists have designated this as a high hazard region based on studies of buried sand blow deposits within the Mississippi River Valley. Sand blow deposits are believed to be the byproduct of strong ground shaking associated with large earthquakes. These deposits have been dated at about A.D. 900 and A.D. 1450 and suggest that major earthquakes (magnitude 7 or greater) reoccur in the region approximately every 500 years, with the last sequence being in 1811-1812.

1.3 Authorities and References

This OLPAN will not impede, override, and/or supersede any Federal, State, or local departments and agencies from carrying out their specific authorities and executing their respective roles and responsibilities in accordance with applicable laws, executive orders, and directives. Throughout the response and recovery effort following a New Madrid earthquake, command and control of Federal, State, or local response and recovery operations will remain the domain of the appropriate affected jurisdiction's official responsible for emergency management. The State and Federal documents listed below provide the legal and regulatory framework for this Plan:

1. Homeland Security Presidential Directive 5 (HSPD - 5), Management of Domestic Incidents, February 28, 2003.
2. Homeland Security Presidential Directive/HSPD-7, Critical Infrastructure Identification, Prioritization, and Protection (December 17, 2003)
3. Homeland Security Presidential Directive/HSPD-8, National Preparedness (December 17, 2003)
4. Executive Order 12656 (as amended) Assignment of Emergency Preparedness Responsibilities (November 18, 1988)
5. Public Law (PL) 107-296, The Homeland Security Act of 2002
6. PL 93-288 42 U.S.C. 5121-5207, et seq. The Robert T. Stafford Disaster Assistance and Emergency Relief Act
7. PL 109-295, Post-Katrina Emergency Management Reform Act of 2006
8. Aviation and Transportation Act of 2001
9. National Response Framework (January 2008)

10. National Incident Management System (NIMS) (December 2008)
11. AFD-070808-022—Defense Support to Civil Authorities (DSCA) Handbook: Air Support Handbook, August 1, 2007.
12. AFNORTH Instruction 10-202A, Joint Concept of Operations (J-CONOPS) Air Mobility Coordination for Crisis Response, March 2, 2009.
13. CJCSI 3710.01 DoD, Counterdrug Support, January 28, 2008.
14. Department of Homeland Security (DHS) Management Directive System MD Number: 0021, Aviation Concept of Operations, April 18, 2005.
15. DHS Management Directive System MD Number: 0020.1, Aviation Management and Safety, February 22, 2005.
16. DHS. 2008. National Response Framework. Washington, DC.
17. DoD Manual 3025.1-M DoD, Manual for Civil Emergencies, June 2, 1994.
18. DoD Directive 3025.18 Defense Support of Civil Authorities, December 29, 2010.
19. Federal Aviation Regulation (FAR), Title 14, Code of Federal Regulations (CFR).
20. FAR Title 14 CFR Part 99, Security Control of Air Traffic, March 30, 2004.
21. Title 32 CFR Part 245, Emergency Control of Air Traffic.
22. National Interoperability Field Operations Guide v1.2, DHS Office of Emergency Communications, March 2008.
23. National Incident Management System (NIMS), December 2008.
24. PMS 311-83, National Wildfire Coordinating Group Task Book for the Position of: Area Command Aviation Coordinator (ACAC), May 2008.
25. U.S. National SAR Supplement (NSS), May 2000.
26. USFS-BLM Interagency Airspace Coordination Guide, July 29, 2003.

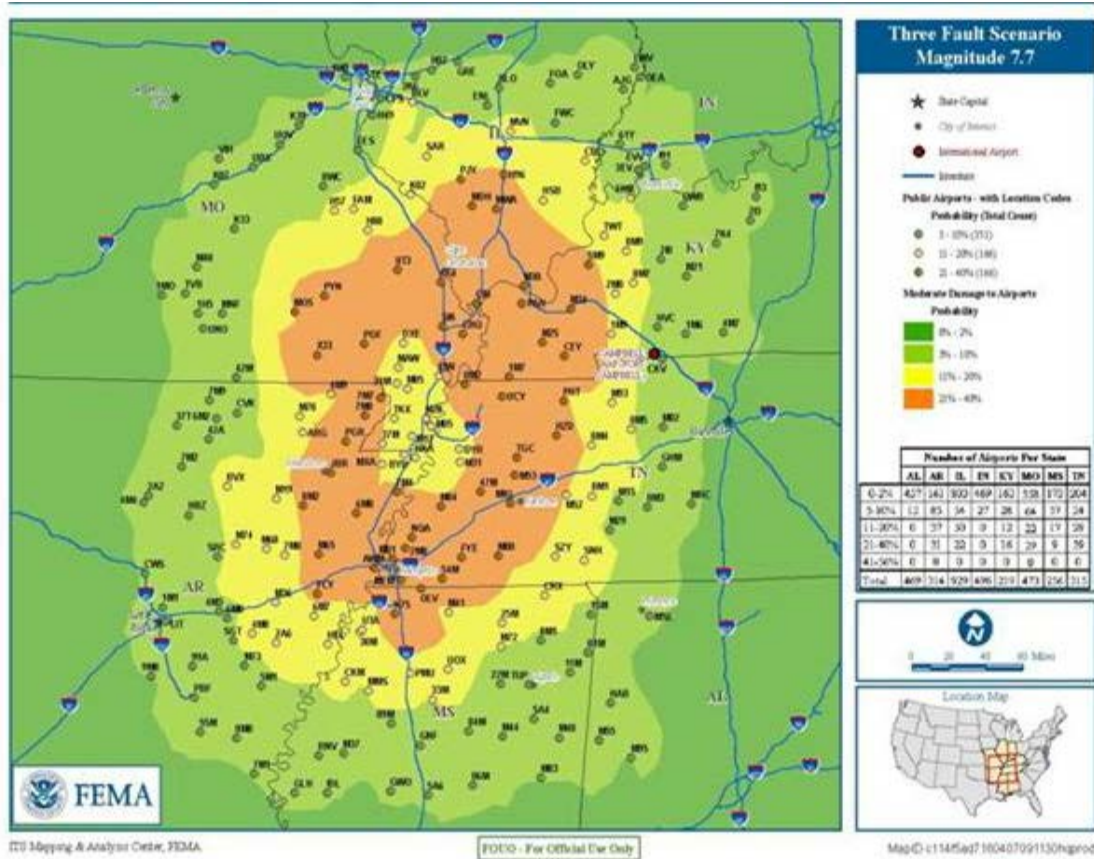
1.4 Threat

A catastrophic NMSZ earthquake will require a national-level response. Consideration must be given to the variety of other local, State and national level agencies that will contribute to the response and recovery effort. Each responding agency will have unique rules, restrictions, capabilities and qualifications. It is imperative air assets are not generalized during the response and recovery. Since most air assets responding to a NMSZ earthquake will be from outside Missouri, they will not be owned by the SEMA or FEMA, and thus still subject to their own standards. For example, while an aircraft from one agency may not be able to perform the full spectrum of missions, it may be uniquely suited for a set mission profile. If the unique qualifications and capabilities of each responding aircraft and crew are taken into account, it will allow the full spectrum of missions to be performed safely and successfully.

The scenario for this incident was developed by The Mid America Earthquake (MAE) Center. Supplemental loss estimation data was based on FEMA's December 2005 Hazards United States Multi-Hazards (HAZUS-MH) model HM Earthquake Event Report, Southeast Missouri. All numbers used in this OPLAN were provided by the MAE Center unless otherwise noted. Sixteen percent of the airports in Missouri will be at least moderately damaged and many more may be nonfunctional due to loss of infrastructure (electricity, water, sewer, natural gas, telecommunications).

Due to the large area of operations (impacted area out to the aviation staging areas), weather may impede response and recovery operations. Aircrews will adhere to basic safe weather minimums as defined by the FAA or their respective agency regulations. Depending on the severity of weather, this may stop air operations entirely or cause restrictions on when and where aircraft may operate. While the JAOB will monitor the effects of weather on air operations, responders on the ground in the impacted area should keep weather in mind and make plans accordingly if inclement weather appears eminent or is already affecting the area.

Figure 3 Potentially Damaged Airports in the New Madrid Seismic Zone



1.5 Critical Assumptions

In the specific event of a catastrophic NMSZ earthquake it may be assumed that:

1. Roads and bridges in and immediately surrounding the affected area will be damaged or heavily congested, impairing emergency transportation to, from, and within the area.
2. Utility lifelines, telecommunications, electricity, gas, water, sewer services to airports will be inoperative for an extended time.
3. Shortfalls can be expected in both the infrastructure and in the logistical areas of transportation in terms of support personnel, equipment, materials, and supplies.

4. The majority of air assets requested (through EMAC or the FEMA Mission Assignment), if approved, will not begin to arrive in Region VII until at least 24 hours after the initial earthquake. Therefore, the first 24 hours of response activities will be reliant on State and local assets.
5. Aviation fuel available within the impacted area will be limited initially and any replenishment will be contingent on when ground routes open. Flight time from aviation staging areas to the impacted area may average one hour for rotary wing assets each way. As a result time spent within the impacted area will be very limited based on fuel requirements.
6. There are very few airfields within the impacted area capable of handling large fixed wing aircraft (i.e. a C-130). It should be assumed that these airfields will have some damage to their runways, taxiways and ramps following a NMSZ earthquake. As a result, each airfield will need to be inspected by proper designated authority in coordination with airport managers prior to supporting fixed wing operations.
7. Primary roads in the impacted area that remain usable will be used primarily as ingress/egress routes for logistics and survivors. Using highways as landing strips for fixed wing aircraft will be unlikely due to the negative effects of shutting down a main highway for an extended period of time.
8. As a result of limited fixed wing operations within the impacted area, it should be assumed any air movement of personnel, equipment and commodities during the initial response will be done via rotary wing aircraft. This will strain the evacuation support capacity due to smaller cargo and passenger load capabilities. As an example, one of the largest helicopters that could respond, the CH-47D Chinook, can only carry approximately 30 people or 24 litters compared to over 100 people on a C-17.
9. Adequate aviation assets (aircraft, crews, airports, servicing facilities, etc.) may not be available within a single agency or jurisdiction to support catastrophic disaster response operations and state wide or regional assets may need to be coordinated for a response.
10. Aviation resources may include aircraft and resources owned, chartered, or leased by the State, and local governments, National Guard, Civil Air Patrol (USAF Auxiliary), commercial operators, and assets made available by private aircraft owners, corporations, private and public airfield owners or operators, other volunteer airmen and civil airports within the State of Missouri.
11. Aviation assets used in disaster support operations in Missouri will remain under the command and control of their parent agency, owner, or operator.

1.6 Planning Assumptions

In the specific event of a catastrophic NMSZ earthquake, the following planning assumptions have been made:

1. State and local aviation planners should be aware the FAA is responsible for the safe and efficient movement of air traffic in and for the operation of the U.S. National Airspace System, as well as for civil aviation safety oversight, during both emergency and non-emergency situations. Accordingly, aviation emergency operations plans should be implemented in a manner consistent with U.S. civil aviation laws, the obligation of the United States under international agreements, and FAA regulations. FAA regulations may prohibit aircraft operators from performing, or accepting compensation for, certain operations described in this document. Additionally, definitions and the use of terms in this document may not correspond with definitions or use of those terms in FAA regulations. Only the FAA may grant deviations or exemptions from its

regulations. State and local aviation planners should also be aware that FAA may take emergency response actions independent of these plans, consistent with its statutory and regulatory authority.

2. Missouri SEMA is the entity through which Missouri leadership acts to initiate, coordinate and direct aviation response operations that exceed the capability of the local government. The designated Director of the State Air Operations Branch should coordinate closely with the FAA and other appropriate Federal agencies to ensure their plans are consistent with applicable FAA and other Federal regulations.

1.7 Mission Essential Task List

In the specific event of a catastrophic NMSZ earthquake, the following mission essential tasks are the responsibility of the both the Joint and State Air Operations Branches:

1. Plan and integrate the Federal and State level aviation operations.
2. Plan and request airspace coordination measures through the FAA.
3. Maintain situational understanding of all aviation resources and operations during the response and recovery phases.
4. Plan and coordinate logistical support to all aviation assets supporting the Federal response.
5. Plan and integrate aviation operations with the Missouri State Emergency Operations Plan (SEOP).
6. Coordinate and synchronize aviation operations with the Missouri State Emergency Operations Center (SEOC) and FEMA Region VII, Regional Response Coordination Center (RRCC) or IOF/JFO.
7. Mobilize aviation assets during an emergency.
8. Coordinate and synchronize the use of federally owned and operated airports within the state during an emergency.
9. Coordinate and synchronize the use of civil owned and operated airports within the state during an emergency.

2.0 Mission

The JAOB/SAOB will provide full-spectrum situational understanding of all air operations in support of the State of Missouri NMSZ earthquake response operations to provide timely, safe and expedient support to responders and survivors. The following activities will guide aviation mission priorities:

1. Life saving
2. Life sustaining
3. Protection of critical infrastructure
4. Protection of property
5. Rapid needs assessment
6. Logistical support
7. Airborne command and control

3.0 Execution

This section describes the execution of the joint State/Federal response.

3.1 Senior Leader's Intent

Implement focused and coordinated joint air response efforts in the event of a NMSZ catastrophic earthquake that supports the Joint NMSZ OPLAN. Follow on missions will be directed by the JFO/SEMA Operations Section Chiefs who will maintain Tactical Control (TACON) over their respective air branches.

3.2 Concept of Operations

Upon activation of the SEOC following a NMSZ trigger event, Missouri will organize a State Air Operations Branch in accordance with their SEOP and SEOC Standard Operating Guide. As Federal resources begin to arrive in support of Missouri, the JAOB will be established and located at the IOF/JFO (wherever the FCO and SCO are located). The JAOB and SAOB will exchange Liaison Officers to ensure a unity of effort.

The JAOB/SAOB will function as a central clearinghouse that develops priorities, assigns missions, allocates aircraft and resources; tracks mission results, provides appropriate briefings, collects cost information, and identifies and resolves flight safety and airspace issues, particularly between agencies. The MONG will lead the SAOB when formed. The JAOB and SAOB will work together to complete the following types of aviation mission sets IAW published CONPLANS:

1. Rapid damage assessment/situation awareness flights
2. Search and Rescue (S&R)
3. Aero-medical evacuation
4. Movement of disaster response personnel (e.g., public safety personnel, police, firefighters, emergency medical service, emergency management personnel, and other emergency workers)
5. Transportation of medical teams and supplies
6. Airborne firefighting
7. Critical human needs assessment
8. Emergency evacuations
9. Communications relay/airborne repeaters
10. Airborne command and control
11. Transportation of life sustaining commodities to locations cut off from surface transportation modes
12. Air support for essential priority commercial, corporate, industrial, health and welfare, and agricultural requirements in emergency response and recovery operations
13. Critical infrastructure patrol
14. Key and essential leaders' reconnaissance
15. Monitoring of Temporary Flight Restrictions (TFR)

REDACTED

Air Operations Annex E

Joint Missouri & FEMA Region VII Plan

According to the NMSZ OPLAN, State resources will automatically deploy after an earthquake measuring 6.5 M_w or greater on the Richter Scale. Aircraft will fly predetermined routes to assess damage and collect other information. See Appendix 7 for a detailed list of priority routes and missions.

Damage assessment, response operations and search and rescue will be the highest initial priority in accordance with Missouri's Aviation Operations Plan. After the initial establishment of the common operating picture, the aviation mission sets will follow the priorities of the mission sets listed above managed initially by the SAOB and then in coordination with the JAOB.

Alert/Activation. Immediately after a NMSZ earthquake requests for air assets will be submitted. The primary means will be via State resources, EMAC, Federal Mission Assignment, and Federal contracting. Concurrently the Mission Assignment section will also submit requests for personnel required to staff the JAOB. The Missouri National Guard will manage and fill the SAOB with State resources.

Deployment. Personnel assigned to the JAOB (i.e. agency liaisons or mission specialists) will deploy to the IOF and then as necessary be tasked to follow-on locations in support of the response and recovery effort. Non-State or EMAC air assets falling nominally under the JAOB (i.e. aviation fuel trucks or helicopters and crew) will most likely deploy initially to Federally owned facilities (i.e. Whiteman AFB or Fort Leonard Wood) before continuing on to their forward staging areas. During the initial deployment, respective ESFs and controlling agencies will be responsible for status updates to the Operations Section Chief but upon activation the JAOB will assume responsibility for tracking and updating the status of all air operations assets.

Personnel assigned to the SAOB will deploy to the Missouri JOC and then as necessary be tasked to follow-on locations in support of the State response and recovery effort.

Upon activation, the SAOB will provide the initial airspace coordination. Once the JAOB is established, the SAOB will provide an airspace manager to the JAOB to work in conjunction with the JAOB Airspace Coordinator to ensure unity of effort in the airspace management.

Employment/Sustained Response. Due to the nature of available aviation staging areas and the likely inability to transport required logistical support to within the impacted area, aviation assets will be dispersed among several locations. While specific missions will be directed from the Operations Section Chief, many missions will be "ad hoc" type missions. The JAOB/SAOB will work to then ensure air and ground crews are able to maintain flexibility in accepting these missions while simultaneously working towards meeting the goals set forth for the response and recovery effort.

Demobilization. As ground routes reopen into the impacted area, the need for air assets will diminish. Thus air assets are released back to their owning agencies or ESFs. Aviation staging areas will be consolidated and personnel within the JAOB will be released. A decision to demobilize the JAOB will be made based upon the level of mission complexity and span of control.

As the Federal and EMAC assets are released the SAOB will continue to operate until State aviation resources are no longer needed.

LNOs will be released as their assigned organizations complete their assigned missions and upon approval of the JFO/SEOC Operations Section Chiefs.

During the first 72 hours following a NMSZ earthquake, air operations will focus primarily on response operations. After such time and as directed by and ordered, operations will transition to primarily recovery operations. During both phases, many of the missions will remain the same. The primary missions will be transporting survivors, responders and commodities. Refer to the Aviation Mission Sets above for more detailed descriptions. The JAOB and SAOB will manage and coordinate all air

operations supporting the State of Missouri. During times that the branch is not activated, each respective ESF and controlling agency will be responsible for coordination and reporting on their air assets.

Clearing debris and affecting repairs to the runway is vital to successful airport operations. The Missouri Department of Transportation (MoDOT) is the lead agency for ESF-1 Transportation in the Missouri SEOP. MoDOT may assume control of intact surface transportation routes and facilitate restoration of surface roads serving airports.

A TFR area and associated Notice to Airmen (NOTAM) need to be coordinated through the FAA for implementation. This will be accomplished by State through the EOC or AOB with the appropriate FAA representative. It should be noted due to the magnitude of this disaster, FEMA Region VII can assist Missouri with this function, however all coordination will be accomplished through the FAA. Only the FAA has the authority to designate a TFR and the responsibility to license and manage civilian pilots and aircraft. Therefore they are a critical participant in the State's Aviation strategy. The JAOb, in coordination with the SAOb, will be responsible for producing the Airspace Coordination Plan to document the following:

1. Identify TFRs
2. Designate areas of operations
3. Assign frequencies
4. Identify points of contact
5. Highlight transition corridors
6. Describe emergency procedures and coordination
7. Organize civil airports within the State into multiple staging areas to minimize the impact of terrain, weather, air traffic volume, ground support services, and use of fixed and rotary wing aircraft.

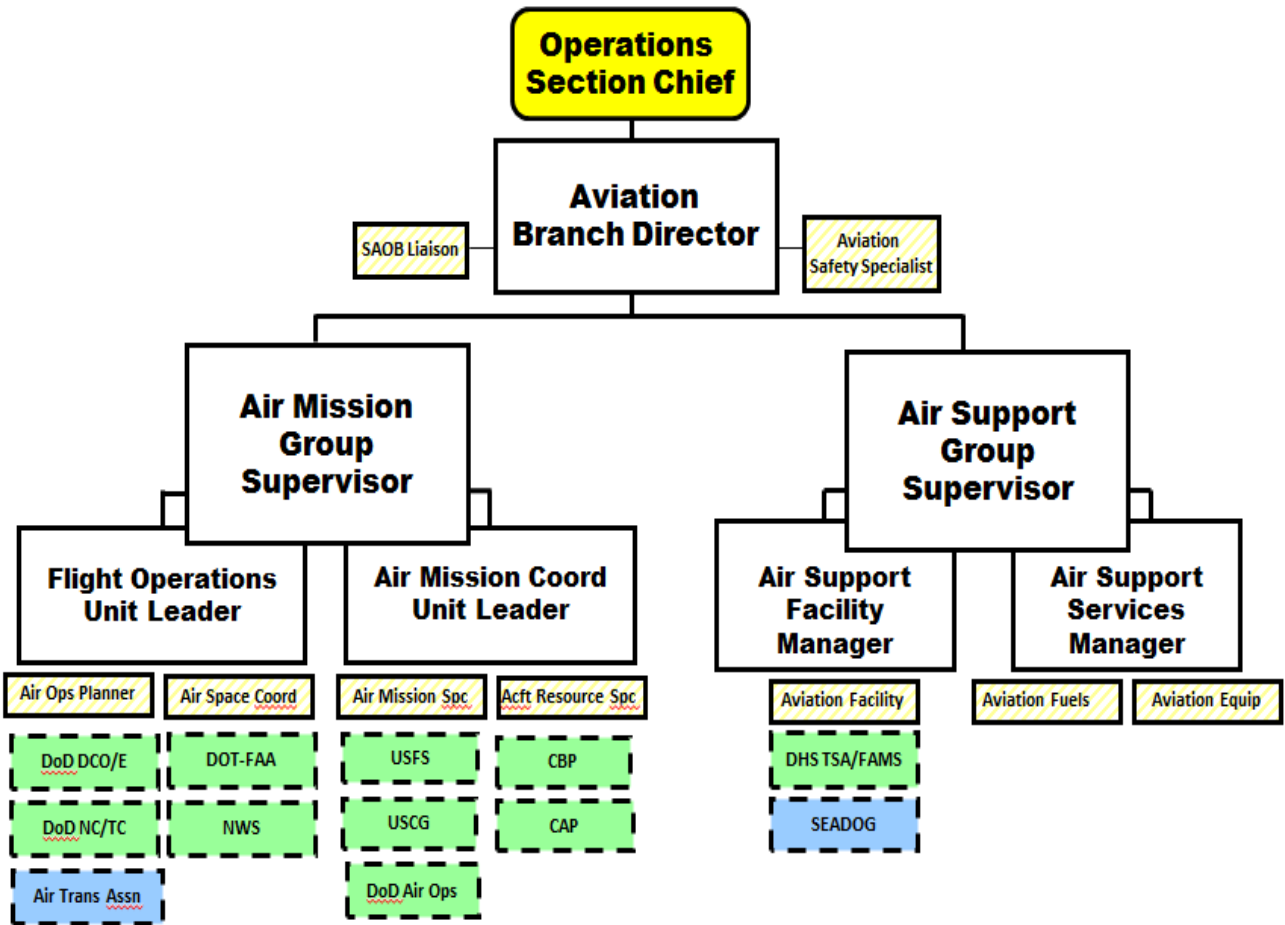
The NMSZ OPLAN establishes policies and provides for coordinating State, Federal and volunteer organizations' response to disasters or emergencies. The goal of a joint aviation response plan is to be as simple and concise as possible while operating in a safe and efficient manner. This plan establishes parameters for the effective integration of aviation assets into disaster response and recovery activities. The JAOb will be responsible for gathering and sharing all aviation related documents.

Several airfields in Missouri have been identified as potentially suitable for aviation operations following a NMSZ earthquake **REDACTED**. Some of these airfields are located within the impacted area and may suffer severe damage. Damage assessments of both the airfields and ground routes in and around the airfields will determine where air operations will occur.

3.2.1 JAOb Organization

The JAOb is responsible for coordinating the aviation portion of disaster response efforts. The makeup of the JAOb is situation-dependent and could include representatives from State, local, and Federal agencies and non-governmental organizations (NGO). The JAOb is part of the JFO and its role is to support State and Federal aviation needs safely and efficiently.

Figure 4 Joint Air Operations Branch Organization



1. Joint Aviation Operations Branch Director

The Joint Aviation Operations Branch Director develops priorities in accordance with the Operation Section Chief's guidance, assign strategic and operational missions, allocate aircraft and other resources, track mission results, provide appropriate briefings, collect cost information, and identify and coordinate the resolution of flight safety issues, particularly between agencies. The JAOB Director should have an understanding of State and Federal processes and procedures and interagency roles and responsibilities. Because of the complexity, the position may not be filled by one individual, but instead be filled by a State and Federal representative acting under the ICS principle of a unified command. Regardless, the Branch Director coordinates air activities and aviation information flow between all agencies with aviation assets in the disaster zone to do the following:

1. Deconflict air mission taskings and schedules.
2. Coordinate aviation frequencies and communication protocol with the FAA and air operators performing response air missions.
3. Coordinate with the FAA on mission needs for airspace restrictions and of the identification and resolution of aviation safety issues.
4. Resolve aviation issues.

5. Identify air traffic and/or airspace management issues and coordinate with the FAA.
6. Coordinate air mission and ground support operations.

2. Aviation Safety Officer

The Aviation Safety Officer works directly for the JAOB Director. The Safety Officer should have knowledge of all aspects of flight safety for the type of aircraft and missions to be flown. Safety is a paramount concern. An experienced airman should be designated to concentrate on safety issues, such as impending weather conditions, crew duty limitations, and any hazardous conditions that exist in the operation. The Safety Officer receives and processes all SAFECOMs.

3. Air Mission Group Supervisor

The Air Mission Group Supervisor coordinates the employment of aviation assets performing response air operations. The Supervisor is responsible for conducting an initial review of requested air missions and assigning them to either the Air Mission Unit or the Flight Operations Unit for processing, depending on available asset configurations from participating and supporting agencies and the magnitude or scope of the mission request. The will keep the JAOB Director informed of all missions that are classified or assigned the highest level of priority by those requesting the aviation missions. The Supervisor should have an understanding of State and Federal processes and procedures and interagency roles and responsibilities.

4. Flight Operations Unit Leader

The Flight Operations Unit Leader is responsible for coordinating the sourcing of mission requests that are beyond the capabilities of staged air assets or outside of a reasonable radius from the affected disaster area. The Leader will work with the Air Operations planner to further define flight requests. This coordination and planning may result in the use of EMAC or FEMA pre-scripted action requests and pre-scripted mission assignments to fulfill the requests. These types of flight requests require close coordination and consultation with the Air Support Group Supervisor for both aviation facility and aviation services support to accomplish these mission requests. The Flight Operations Unit Leader should have an understanding of State and Federal processes and procedures and interagency roles and responsibilities.

5. Air Operations Coordinator

The Air Operations Coordinator is responsible for all administrative work in the Aviation Branch, making personnel directories and assisting wherever needed. The Air Operations Coordinator should have some previous experience with aviation.

6. Airspace Coordinator

The Airspace Coordinator establishes and coordinates TFRs to ensure flight safety and provides guidance and briefings to pilots operating within the Joint Operations Area (JOA) or TFR, as well as internal staff. This position will likely be filled by an FAA representative during the initial response phase and by a FEMA or other Federal airspace specialist during the recovery phase. Upon activation, the SAOB will provide the initial airspace coordination. Once the JAOB is established, the SAOB will provide an airspace manager to the JAOB to work in conjunction with the JAOB Airspace Coordinator to ensure unity of effort in the airspace management.

7. Air Mission Coordination Unit Leader

The Air Missions Coordination Unit Leader manages ongoing aviation missions, orchestrates airspace management, acquires aviation assets, develops Mission Assignments, and coordinates with other functional area planners and organizations to determine the appropriate aviation assets and airframes

to accomplish the mission. The tasking of individual missions will be the responsibility of the assigned agency who owns/operates the airframes. Mission and flight information will be entered into a master sortie tracker and communicated back to the original requester through established channels or a common operating picture (COP). The Unit Leader should have an understanding of State and Federal processes and procedures and interagency roles and responsibilities.

8. Air Mission Coordinator

The Air Mission Coordinator leads the coordination team with ongoing aviation missions and airspace management, and coordinates with other functional area planners and organizations. The tasking of individual missions will be the responsibility of the assigned agency. Mission and flight information will be entered into a master sortie tracker and communicated back to the original requester through established channels or a COP.

9. Aviation Resources Coordinator

The Aviation Resources Coordinator leads the coordination team in acquisition of aviation assets and coordinates with other functional area planners and organizations to determine the appropriate aviation assets and airframes to accomplish the mission. Mission and flight information will be entered into a master sortie tracker and communicated back to the original requester through established channels or a COP.

10. Air Support Group Supervisor

The Air Support Group Supervisor leads efforts to procure or establish all support functions necessary to enable the JAOb. The Group coordinates with other functional area planners and organizations to establish and operate bases for aviation assets. The Air Support Group Supervisor also monitors all aviation ground support operations, including maintenance status, logistics, billeting, and communications.

11. Air Support Services Manager

The Air Support Services Manager is responsible for operational planning and coordination with the ordering entity and acquisition services to obtain aviation services support at facilities (e.g., fuel, equipment, services, ground support operations). The Air Support Services Manager will coordinate logistics requirements with the joint State and Federal Logistics Section Chiefs.

12. Air Support Facilities Manager

The Air Support Facility Manager orchestrates operational planning and coordination for use of aviation facilities, understands aviation flight and ground support operations, and monitors the status of airports, airfields, and helibases supporting the disaster response. Additional responsibilities include the effective employment of State law enforcement, Transportation Security Administration (TSA), and Federal Air Marshall Service (FAMS) personnel to ensure safety and security at all aviation facilities, where applicable.

13. Region Coordinator

The Region Coordinator is responsible to the JAOb for all civil aviation activities within their State Aviation Region under the Missouri aviation plan. The Coordinator prepares and maintains current appropriate alert notifications lists to assure the expeditious transmission of the aviation plan Activation order. This list will include the County Coordinators, Airport Coordinators, and Manager of the Primary Airport.

The Region Coordinator makes appropriate arrangements with the Airport Manager of the Primary Airport for adequate space and facilities to be used as the Region Operations Office, giving special consideration to the following:

1. Adequate office space for administration and files
2. Adequate storage for equipment, charts, status boards, etc.
3. Accessibility to the flight line
4. Adequate briefing facilities for aircrews
5. Communications with:
 - a. JAOB
 - b. Kansas City ARTCC
 - c. Memphis ARTCC
 - d. County EOCs
 - e. Local airports within the Region

The Regional Coordinator notifies the Region Primary Airport, County Coordinators and other airport within the Region. The Regional Coordinator also assists the Primary Airport Manager in:

1. Developing and implementing the Airport Disaster Control Plan.
2. Preparing an initial damage assessment report for the JAOB.

The Region Coordinator coordinates with local emergency management agencies in the region to ensure proper and coordinated aviation resources are supplied. Additional responsibilities include documenting all arrivals and departures of aircraft involved in disaster or emergency response and forward that information to the JAOB.

14. Aviation Fuels

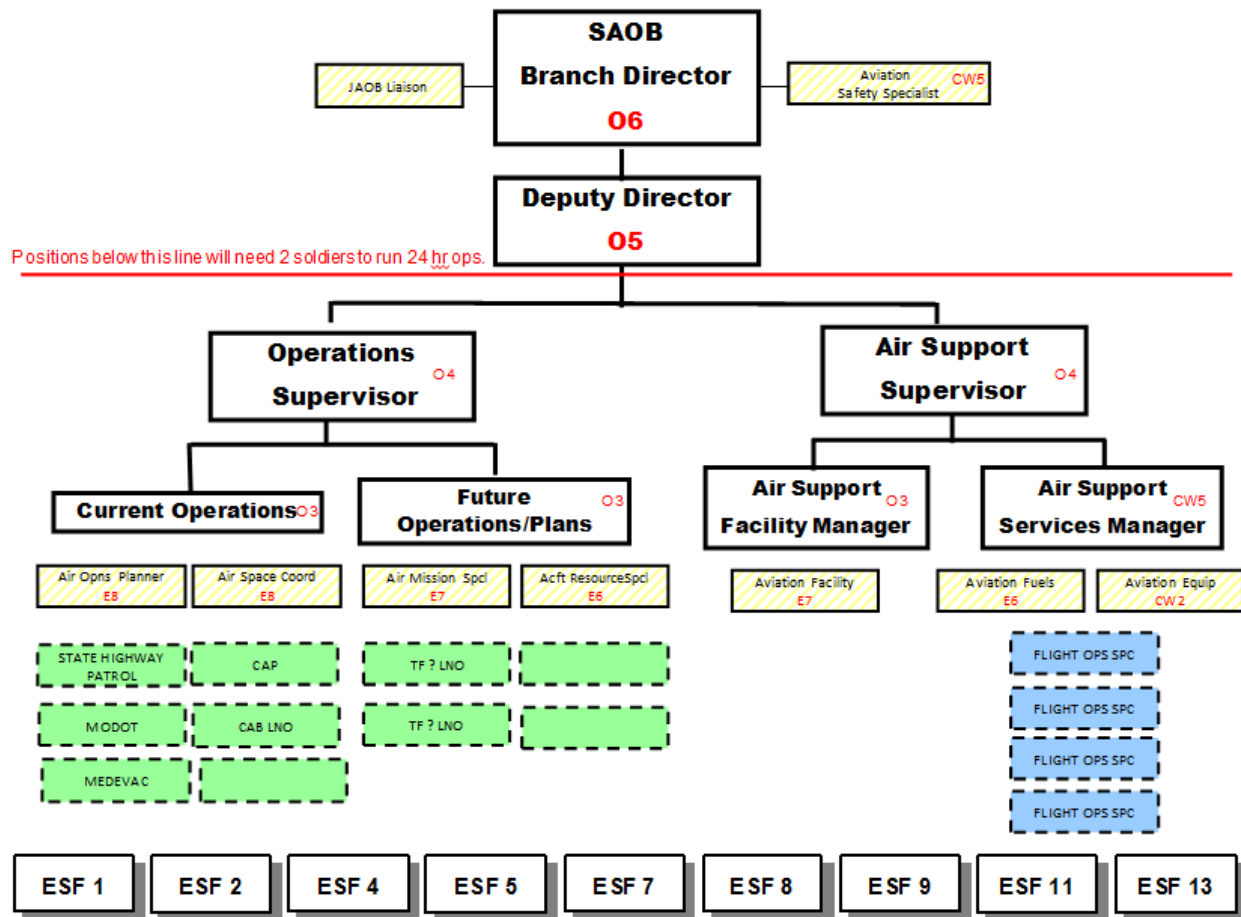
The Aviation Fuels Specialist coordinates the use of aviation fuels facilities, understands aviation flight and ground support operations, and reports the status of airports (e.g., fuel quantities), airfields, and helibases supporting the disaster response.

15. Aviation Equipment and Maintenance

The Aviation Equipment Specialist orchestrates operational planning and coordination for use of aviation equipment and maintenance facilities, understands aviation flight and ground support operations, and monitors the status of airports (e.g., equipment status), airfields, and helibases supporting the disaster response.

3.2.2 SAOB Organization

The State of Missouri will form a State level AOB during the initial hours of the response. This will be a State level management asset to coordinate the use of fixed and rotary wing aircraft during response efforts supporting Federal agencies, State, local, and tribal governmental entities, and voluntary organizations requiring or providing aviation assistance during a disaster and emergency.



1. State Aviation Operations Branch Director

The State Aviation Operations Branch Director develops priorities in accordance with the MONG JOC and SEMA, assign strategic and operational missions, allocate aircraft and other resources, track mission results, provide appropriate briefings, collect cost information, and identify and coordinate the resolution of flight safety issues, particularly between agencies. The SAOB Director should have an understanding of state and federal processes and procedures and interagency roles and responsibilities. The SAOB Director coordinates air activities and aviation information flow between all agencies with aviation assets in the disaster zone.

2. State Aviation Operations Branch Deputy Director

The State Aviation Operations Branch Deputy Director works directly for the SAOB Director, his duties are to ensure that all elements within the SAOB are working together and communications are a constant between the SAOB, Aviation Task Force, JAOb, and the MONG JOC. The Deputy Director will act as the Director in his absence.

3. Aviation Safety Officer

The Aviation Safety Officer works directly for the SOAB Director. The Safety Officer should have knowledge of all aspects of flight safety for the type of aircraft and missions to be flown. Safety is a paramount concern. An experienced aviator should be designated to concentrate on safety issues, such as impending weather conditions, crew duty limitations, and any hazardous conditions that exist in the operation.

4. Operations Supervisor

The Operations Supervisor coordinates the employment of aviation assets performing response air operations. The Supervisor is responsible for conducting an initial review of requested air missions and assigning them to either the Aviation Task Force or any other asset that belongs to the SAOB, depending on available asset configurations from participating and supporting agencies and the magnitude or scope of the mission request. The Supervisor will keep the SAOB Director informed of all missions that are classified or assigned the highest level of priority by those requesting the aviation missions. The Supervisor should have an understanding of state and federal processes and procedures and interagency roles and responsibilities. The Supervisor will maintain both current and future operations and ensure that all missions are tracked till complete.

5. Airspace Coordinator

The Airspace Coordinator establishes and coordinates TFRs to ensure flight safety and provides guidance and briefings to pilots operating within the Joint Operations Area (JOA) or TFR, as well as internal staff. The Airspace Coordinator will have a direct link to the JOAB and FAA to ensure that all agencies are up to date with current airspace issues.

6. Air Support Supervisor

The Air Support Supervisor leads efforts to procure or establish all support functions necessary to enable the SAOB. The Supervisor coordinates with other functional area planners and organizations to establish and operate bases for aviation assets. The Air Support Supervisor also monitors all aviation ground support operations, including maintenance status, logistics, billeting, and communications.

3.2.3 Policy

The following actions are required:

1. Federal and State agencies will operate within their own internal guidelines during response and recovery operations as well as under the Code of Federal Regulations 44 (Emergency Management and Assistance).
2. Aircrews will adhere to internal guidelines and all FAA regulations while conducting air operations unless a waiver is granted by the proper approval authority.

3.2.4 Critical Information Requirements

The following critical information requirements (CIR) exist for air operations and will be reported to the JAOb/SAOB at the first possible opportunity:

1. Any accident resulting in damage to the aircraft or injury to personnel.
2. Any aircraft grounded due to unplanned maintenance for longer than 6 hours.
3. Any unknown or unannounced flight hazard within the area of operations (i.e. unmapped radio tower or unauthorized aircraft).
4. Any loss of aircrew that will affect the listed mission ready status.

The JAOB/SAOB, in coordination with the FAA, will provide the aviation community with information regarding disaster operations. This notification will be done through the FAA Domestic Events Network (DEN), Notice to Airmen System (NOTAMS), FEMA External Affairs, industry-related groups, etc.

3.2.5 Area Operating Base Preplanning

The following pre-planning activities are required for each State and Federal operation planners:

1. Establish contacts, develop a directory, and conduct coordination with State emergency aviation operations to include a review of State aviation plans and protocols.
2. Identify and catalog all available aviation assets (e.g., National Guard aircraft) and facilities (e.g., airports and ANS facilities, such as Air Traffic Control Towers (ATCT) in coordination with the FAA, State aviation departments, and other key stakeholders.
3. Develop a directory of personnel who will support aviation operations during activation and determine resource and personnel requirements to support the JAOB/SAOB.

3.2.6 Aviation Safety

Safety is the paramount consideration in all operations. Each agency or organization involved in the operation will continue to adhere to its own safety standards, as well as FAR. Additional safety practices may also be implemented in coordination with FAA.

As agencies are tasked with tactical aviation missions in the disaster area, consideration should be given to defining geographical areas of operation to ensure adequate safety, control, and coordination to address constraints between the various agencies. Participating agencies will ensure appropriate procedures, which comply with FARs, are in place for overdue aircraft. Overdue aircraft suspected to have been lost are to be reported to the JAOB/SAOB and FAA immediately.

Initial reporting of all incidents should be in accordance with each department, agency, and/or military branch guidelines. Each agency will follow its own aviation mishap and investigation procedures. However, all aircraft mishaps, near midair collisions, and/or violations of TFRs will be reported to the JAOB/SAOB and FAA immediately. Aviation Safety also includes coordinating with the FAA to define the altitudes to be used by different airframes and mission types.

Aviation Safety Guidance:

1. Recognizing the high-risk nature of disaster relief missions, the State of Missouri strives to promote and coordinate aviation safety. Aviation safety considerations are paramount and are the responsibility of everyone at every ICS level; they must be carefully addressed during every phase of each mission.
2. Aircraft separation is the single largest concern with multiple missions operating in the same area. Each agency/organization involved in the operation should continue to adhere to its own safety standards as well as FAA-required safety regulations. The JAOB/SAOB may also mandate additional safety practices based upon the specific situation.

3. All mishaps and unsafe conditions or actions will be reported to the chain of command immediately. It is the responsibility of the chain-of-command to correct the situation in order to prevent loss of life and damage to equipment and property. All mishaps will be reported to the FAA and the JAOb/SAOb Director immediately. Initial reporting of all incidents should be reported in accordance with each specific agency/branch guidelines, as well as the FARs. Each agency and/or military branch will follow its own aviation mishap/investigation procedures. Copies of any mishap/investigation reports should be forwarded to the FAA and the JAOb/SAOb Director.
4. The focal point for safety during disaster response is at the SEOC/JFO and resides with the Aviation Safety Officer. As a qualified aviator normally assigned as a liaison to the JAOb/SAOb, this individual has the responsibility of maintaining an unbiased view of the overall aviation operation and making recommendations to the JAOb/SAOb Director, as appropriate. Additionally, the JAOb/SAOb Director may unilaterally implement specific safety practices based upon operational requirements or situations.
5. Safety issues that must be constantly addressed include, but are not limited to, ground operations, flight operations, weather, airspace deconfliction, aircraft status, and specific operational mission procedures. Each flying organization is responsible for enforcing its own safety standards and practices to include crew rest and crew duty day regulations, as well as complying with disaster specific FAA procedures. Other safety issues will be conditionally-specific.
6. When a safety issue arises, it is the responsibility of the persons detecting the problem to either stop associated flight operations and/or immediately bring the situation to the attention of supervisory personnel. Flight operations should be discontinued until the situation in question has been resolved. Safety issues should be reported at the earliest possible time so that fast and effective cross tell of the incident can be initiated if required.

3.2.7 Aviation Resource Management

The JAOb/SAOb are responsible for aviation resource management. At a minimum, the following information should be maintained:

1. A listing of aviation mission assignments and mission closeouts.
2. A list of participating aircraft and other pertinent information to be generated on the Aircraft Assignment List and maintained by the JAOb/SAOb on ICS Form 220 (Air Operations Summary).

This information will be included as part of the daily Air Coordination Plan. The Resources Unit of the Planning Section will use ICS Form 220 prepared by the JAOb to track the status of the air assets assigned. This includes the current response aircraft status, actual vs. scheduled sorties flown, actual vs. scheduled hours flown, actual vs. scheduled passengers moved, and actual vs. scheduled freight tons moved. When developed, report this information to the SEOC.

3.2.8 Air Mission Management

The JAOb/SAOb are responsible for air mission management. See Chapter 6 for a detailed explanation of the air mission process.

3.2.9 Flight Following and Traffic Advisories for Aircraft Involved with Disaster Response Missions

Aircraft will maintain positive communications, including flight following with the controlling agency (e.g., ATC facilities, airborne control and coordination platforms). As requested and as practicable, the FAA may assist with flight following. The FAA may also provide flight advisory services; however, the FAA has historically not provided flight advisory services in the operations area during disasters.

Airborne control and coordination platforms (e.g., CBP P-3, E-3 Airborne Warning and Control System [AWACS]) should be considered when regular air traffic services are disrupted or if the majority of operations are conducted below or outside FAA radar coverage. As practicable, the FAA or, as requested by the FAA, other involved departments and agencies with assets, such as radar aircraft, may provide visual flight rules (VFR) advisories.

In areas where ATC normally provided by the FAA is temporarily disrupted or degraded, the FAA may request assistance from CBP Office of Air and Marine, DoD, and other partner departments and agencies to provide select flight assistance, such as traffic advisories using various airborne and ground assets. The use of these assets must be coordinated with any ATC facilities still active in or adjacent to the impact area. If response aircraft have to operate from airports, airfields, helibases, or other facilities where normal ATC services are temporarily unavailable, the FAA may use portable ATCTs or request assistance from DoD/National Guard for expeditionary airfield equipment.

3.2.10 Airspace Guidance

The Interagency Airspace Coordination Guide contains airspace guidance that will be utilized during a NMSZ event. This guide can be found online at: <http://www.airspacecoordination.org/guide/index.html>.

3.3 Key Roles and Responsibilities

3.3.1 Joint Air Operations Branch

Following a catastrophic earthquake, Region VII along with Federal partners will form the JAOb building on the State AOB with additional support from multiple regional and Federal entities. The JAOb, when formed, will be responsible to coordinate the use of fixed and rotary wing aircraft during response efforts supporting Federal agencies, State, local, and tribal governmental entities, and voluntary organizations requiring or providing aviation assistance during a disaster and emergency. The primary responsibility of the JAOb is to coordinate procurement and integration of aviation assets requested by Missouri SEMA for response activities. The JAOb coordinates between agencies while providing a point of contact for aviation coordination into and from the disaster area working with the FEMA RRCC or JFO. This role is enabled by a number of key functions, including:

1. Support of air mission requests
2. Prioritization of aviation missions
3. Mission assignment of available aviation assets
4. Air mission planning and coordination, including deconfliction
5. Situational awareness of aviation operations in the incident area
6. Coordination of ground support services at designated airports

The JAOb helps to identify and resolve flight safety issues, especially those involving multiple departments and agencies, in coordination with the FAA, which retains ultimate aviation safety oversight authority. The JAOb may consist of the following participants:

Federal Emergency Management Agency

FEMA's Response Directorate is primarily responsible for providing advisory planning guidance for disaster and emergency response at State, regional, and national levels for the utilization of aviation resources during an emergency. FEMA Region VII provides this guidance within their area of responsibility.

National Response Coordination Center

The NRCC maintains overall national situational awareness and bears responsibility for the mobilization of aviation assets nationally. Additionally, the NRCC is tasked with the prioritization between FEMA regions when multiple regions have incidents.

Joint Field Office / Initial Operating Facility

Upon commencement of the Federal response, the Federal Coordinating Officer (FCO) may establish an Aviation Branch to coordinate Federal aviation resources in support of State requirements. This organization could be located at the JFO/IOF or co-located with the State AOB. At minimum there will be a FEMA LNO at the JA OB.

Customs Border Protection Air and Marine

1. CBP operates the world's largest law enforcement air and marine fleet with 270 fixed and rotary wing aircraft and 180 marine vessels from 45 locations throughout the United States.
2. CBP aircraft can provide airborne early warning (AEW) with traffic advisory services in the event normal ATC is unavailable in an impact area. During past large-scale disasters CBP has performed the following functions:
 - a. Check aircraft into/out of the TFR
 - b. Ensure each aircraft had a valid need to be in the airspace
 - c. Serve as the single point of contact, in lieu of the normal ATC structure, in the event of an emergency or for general assistance
 - d. Keep aircraft operating in the TFR up to date on airfield/Landing Zone (LZ) and fuel status
 - e. Provide notification of new airspace restrictions (hazardous areas, airborne spraying etc.)
3. CBP aircraft can provide airborne radio relay on local, State, and Federal police, fire, and emergency medical services (EMS) frequencies when repeater towers are inoperative (automatic relay functions of installed radios). Services may include general administrative assistance and relay, passing mission changes/updates to airborne and ground units, passing information quickly to ground command centers avoiding the need to wait for a survey aircraft to land at its base to get status reports. CBP aircraft can also coordinate pickups of ground personnel.
4. CBP has a number of aircraft with sensor equipment to provide damage assessment including video (migrating to high definition [HD]), still images (Digital), mapping (aircraft track history, sensor needs added), real time video/audio/geo transmission (L band INMARSAT, LOS C band and KU Satellite) via Bigpipe and Broadpipe video servers, spot and strip Synthetic Aperture Radar imaging.
5. CBP has organic Search and Rescue (SAR) capabilities with its many rotary wing aircraft and Border Patrol Tactical (BORTAC) teams.
6. CBP has integrated control and coordination of its resources through its Air and Marine Operations Center (AMOC). The AMOC routinely provides flight following and flight advisories to CBP air and

marine assets, and may be able to provide similar capability to non-CBP aircraft during a disaster. The AMOC will stand up an Operations Cell in support of an incident to prioritize, coordinate, and assign resources.

U.S. Coast Guard

1. The United States Coast Guard (USCG) operates a fleet of 211 fixed and rotary wing aircraft.
2. The USCG is the lead Federal agency for airborne search and rescue over water.
3. The USCG may perform any and all acts necessary to rescue and aid persons and protect and save property. The Coast Guard has authority to render aid to distressed persons, vessels, and aircraft on and under the high seas and on and under the waters (including flooding) over which the United States has jurisdiction.
4. The USCG may upon request use its personnel and facilities to assist any Federal agency, State, territory, possession, or political subdivision to perform activities for which the USCG is especially qualified. This includes the USCG's expertise in and resources for:
 - a. Search and rescue operations, particularly in maritime regions, including inland rivers.
 - b. Command and Control – The USCG could provide both qualified personnel and deployable and mobile equipment support to provide or enhance control and coordination capabilities.
 - c. Air operations – USCG aircraft could augment and assist with surveillance, transportation, airlift, and other logistic support.
5. The mission requirements are met by continual coordination with local and State officials facilitated by representation at their county and State emergency operation centers.

Transportation Security Administration

1. The Transportation Security Administration (TSA) has the responsibility for the security of all modes of transportation, including aviation, rail, bus, and maritime operations. TSA is capable of providing security and law enforcement assistance during a mass evacuation. As needed during a disaster, the TSA may provide a LNO to the JAOB. This LNO may assist in obtaining and deploying resources and coordinating safety and security operations at air evacuation operations.
2. TSA provides security officers and Federal Air Marshals (FAM) which can assist in securing airports and aircraft.
3. TSA can provide passenger screening services for non-ticketed passengers during emergency air evacuation operations.

Federal Aviation Administration (FAA)

1. FAA is responsible for the safe and efficient movement of air traffic in and for the operation of the U.S. National Airspace System, as well as for civil aviation safety oversight during both emergency and non-emergency situations.
2. If the FAA determines an emergency exists related to safety in air commerce that requires immediate action, the FAA may prescribe regulations and issue orders immediately to meet that emergency (49 USC 46105(c)). FAA interprets this provision to provide authority for FAA to close airspace, or redirect flight if it is determined that safety and the public interest requires such action. The FAA may also issue TFRs under 14 CFR Part 91.

3. The FAA, under 49 USC 40103, has the exclusive responsibility for developing plans and policy for the use of the navigable airspace and assigning, by regulation or order, the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace. Under this statutory provision, the FAA would have the authority to control or restrict all air traffic at a particular airport. While this technically does not close the airport, the effect is the same while the restriction is in effect.
4. System Operations Security, AJR-2, at Washington Headquarters plays the lead role for Air Traffic Management (ATM) security the FAA Air Traffic Organization (ATO), including response to National Disasters/Crises. The AJR-2 office operates the ATO Crisis Operations Response Desk (CORD) in FAA Headquarters for coordination of aviation requirements within the disaster area and AJR-2 Air Traffic Security Coordinators make sure all crises related information placed on the Domestic Events Network (DEN) is made available to the CORD and key decision makers. FAA AJR-2 works directly with ESF-1 at the FEMA NRCC and with military organizations such as the North American Aerospace Defense Command (NORAD), Continental NORAD Region (CONR), Western Air Defense Sector (WADS), and Eastern Air Defense Sector (EADS) to provide assistance for all ATM security related needs that may be required for crisis/disaster management. In addition, AJR-2 deploys staff to the front line of the crisis/disaster area and key field operating locations to provide direct assistance to FEMA, military organizations, and FAA Service Centers involved in crisis response preparation and response. AJR-2 also provides staff to operate the Crisis Management Center (CMC) and Flight Recovery Desk (FRD) at the FAA Air Traffic Control System command Center.
5. Although all significant U.S. airports receive Federal airport grant funds, the grant assurances that airports are required to provide pursuant to statute generally pertain to maintaining the airports open for aeronautical access. For example, a Federally funded airport agrees in a grant agreement to (1) make the airport available for public use on reasonable terms and without unjust discrimination, 49 USC 47107(a) (1); (2) make the airport available without charge for use by Government aircraft, 49 USC 47107(a) (11), and (3) obtain the Secretary's approval to close the airport temporarily for a non-aeronautical purpose 49 USC 47107(a) (8). The law expressly permits DOT to seek injunctive enforcement of a violation of a grant assurance in Federal court. 49 USC 47111(f). While private non-Federally funded airports are not subject to Federal grant assurances, the FAA still has exclusive control over the airspace above the private airport. State and local governments and airport authorities are the owners of local airports. They have the powers conferred by State and local law. States have firmly established authority to use their police powers to protect their residents. Obviously it is highly desirable to involve State and local government authorities who own the airports, both at the planning stage and in each actual incident, before exercising any Federal authority that would restrict the use of the navigable airspace, and for all practical purposes, an airport as well. Certain operations are permitted within 14 CFR Part 91.137 TFRs, depending on the operational circumstances of the disaster. These operations are spelled out in the language of the TFR. Operators wishing to fly in TFR airspace should contact the appropriate (POC) as specified by NOTAM as issued by the FAA.

U.S. Marshals Service (USMS)

1. The USMS operates a fleet of 6 MD-80 passenger aircraft capable of transporting 140 passengers.
2. Each aircraft is dispatched with a security team, airframe and power (A&P) mechanic, and a nurse.

Department of Health and Human Services (DHHS)/Assistant Secretary for Preparedness and Response

1. The USPHS directs the National Disaster Medical System (NDMS), a federally coordinated system that augments the nation's medical response capability. The overall purpose of the NDMS is to supplement an integrated national medical response capability for assisting State and local authorities in dealing with the medical impacts of major peacetime disasters.
2. USPHS provides oversight and management of hospital patient transfers for aeromedical evacuations (AE).

Department of Defense (DoD)

1. The DoD can provide a large variety of military fixed and rotary wing aircraft as well as commercial contract aircraft.
2. Military installations within Missouri may provide other possible resources. DoD resources are generally only used when State and local assets are overwhelmed. Military commanders have authority to take immediate action to save lives, prevent human suffering, and mitigate great property damage.
3. Once there is a presidential declaration of emergency, and the NRF is implemented, all Federal support, including DoD installation support, will be coordinated through the Federal lead agency, normally FEMA. Missouri officials will need to coordinate through FEMA to obtain DoD assistance after a presidential disaster declaration is made.
4. The Region VII Defense Coordinating Officer (DCO) at the JFO responds to the FCO and serves to interface between military and other Federal, State, local, tribal, and territorial agencies.
5. The Air Force Rescue Coordination Center (AFRCC) coordinates requests for search and rescue assets for the United States. While the Inland Search and Rescue Region (continental United States), is involved, in most situations the actual SAR is carried out by CAP, USCG, or State or local rescue services.

U.S. Forest Service (USFS)

1. The USFS provides transportation assets to FEMA, when USFS resources are the most effective to support FEMA's mission and ESF-4.
2. The USFS provides appropriate engineering and contracting/procurement personnel and equipment to assist in repair of airport runway facilities and baggage loading/unloading operations.
3. Develops contingency plans for use by the National Interagency Fire Center contract aircraft during incidents.
4. Provide equipment and supplies from the Interagency Cache System and use of Interagency Fire Center contract aircraft.

U.S. Department of Interior (DOI)

1. The DOI provides departmental transportation assets, such as fixed-wing aircraft, and support resources, such as mechanics or pilots, as needed to ESF-9 S&R. Resources will be assigned commensurate with each unit's level of training and the adequacy and availability of equipment. FEMA is the contact for ESF-9 support.
2. DOI provides information on the status of, need for, and plan for the restoration of infrastructure.

Bureau of Land Management (BLM)

The BLM may provide an airspace coordinator.

National Park Service (NPS)

1. The NPS conducts operations to include S&R in backcountry, remote, undeveloped, rural, or road less areas that are primarily accessed using specialized equipment and may require responders travel over land by alternate methods or by aircraft.
2. DOI/NPS has a congressional mandate to perform S&R and a cadre of S&R personnel specially trained to operate in their respective areas of responsibility. NPS integrates the S&R capabilities of the U.S. Fish and Wildlife Service, U.S. Geological Survey, and other DOI components in planning for ESF-9.

3.3.2 State Air Operations Branch

The State of Missouri will form a State level AOB during the initial hours of the response. This will be a State level management asset to coordinate the use of fixed and rotary wing aircraft during response efforts supporting Federal agencies, State, local, and tribal governmental entities, and voluntary organizations requiring or providing aviation assistance during a disaster and emergency.

The SAOB may consist of the following participants:

Missouri Air National Guard and Army National Guard

1. The MONG has dual missions to support the Governor of Missouri by providing trained personnel and unit equipment capable of deploying to protect life and property, and maintain peace, order, and public safety and to support U.S. military objectives. The MONG represents the Governor's first line of military response to support domestic emergencies. They provide an organized and trained force that provides the Governor with a diverse response capability. As per AFD-070808-022—*Defense Support to Civil Authorities (DSCA) Handbook: Air Support Handbook*, August 1, 2007, DoD planning recognizes Army and Air National Guard forces, acting under State orders, (i.e., not in Federal service), have primary responsibility for providing military assistance to State and local government agencies in civil emergencies."

Missouri Department of Transportation

MoDOT is the lead agency for ESF-1, Transportation. MoDOT has the responsibility to assess all ground routes in the impacted area as well as any airfields prior to being used by aircraft. MoDOT may assume control of intact surface transportation routes and facilitate restoration of surface roads serving airports.

Missouri Department of Conservation

The Missouri Department of Conservation operates a fleet of fixed wing aircraft and can provide air assets.

Missouri State Highway Patrol

The Missouri State Highway Patrol operates fixed and rotary wing aircraft and can provide air assets.

Missouri Wing Civil Air Patrol (CAP – U.S. Air Force Auxiliary)

The Missouri Wing CAP operates nine fixed wing aircraft located throughout the state. CAP operates 550 fixed wing aircraft nationwide and can assist State and local governments in performing various

missions. The State of Missouri and CAP Missouri Wing have a Memorandum of Understanding (MOU) describing the State's use of aviation resources during emergencies. The CAP Wing Commander and headquarters organization retain overall supervision over CAP subordinate units. This arrangement provides the JAOB with CAP staff experience without disrupting the CAP organization, and the State still directs the operation.

Private Sector Coordination Requirement

All private sector organization wishing to operate within that area of operations not covered under an existing Federal or State contract will need to coordinate with the JAOB for approval per the temporary flight restriction.

NGO Coordination Requirements

Any NGO operating air assets within the area of operations not already part of the response or recovery effort (i.e. requested via EMAC or through the Mission Assignment process) will need to conduct coordination with the JAOB for approval per the temporary flight restriction.

3.3.3 Incident Command Posts

Multiple ICPs may be established, in coordination with the SEOC and will be responsible for the management of air missions and associated support activities in their area of operational responsibility. These ICPs should coordinate closely with the SEOC, who, in turn, will coordinate with the JAOB/SAOB.

4.0 Administration, Resources, and Funding

1. Administration.

- a. **Responsibilities for management oversight of all administrative and logistical requirements supporting air operations.** When activated, the JAOB/SAOB will assume the management oversight for all administrative and logistical needs pertaining to air operations. In the absence of this branch, the Operations Section will assume management oversight of the respective ESFs and participating agencies
 1. **Coordination of State mutual aid agreements.** Coordination of any State mutual aid agreements or EMAC assistance as it pertains to air operations will be done within the Missouri State Emergency Management Agency. However, the State should still ensure any changes to aircraft capabilities or assets available should be relayed to the JAOB.
- b. **Resources.** Resources will be determined based on the severity of a NMSZ earthquake. The amount of damage and the needs of the survivors will determine adjudication of national assets among the four affected FEMA regions.
 1. **Concept of Logistical Support.** Logistical support will most likely be centered at any aviation staging areas established in response to the earthquake. Any staging areas will be chosen based on the proximity to undamaged roads suitable for heavy traffic. The Air Support Group Supervisor will work with the Logistic Chief to ensure aviation resources (i.e. fuel and parts) are accounted for and delivered to the proper locations.
 2. **Logistics Management.** The Air Support Group Supervisor will work with the Air Support Facility Manager and the Air Support Services Manager to determine resource status and needs. Each aviation staging area will have a representative from the Air Operations branch

on site. In addition to the staging areas, smaller airfields may be designated as helispots. Helispots may not have any representatives of the JAOB/SAOB on site; however, the Air Support Group Supervisor will maintain a dialogue with the Airfield Manager for all helispots in order to track resource status and needs.

3. Mission Assignments

Mission Assignments that deploy air resources will fall under the management of a Project Manager. This Project Manager will be responsible for all work done under the Mission Assignment to include tracking costs and issuing task orders. No one except the Project Manager is authorized to issue a Mission Assignment task order. The Project Manager will be located within the Operations Section and may or may not be located within the JAOB. It is imperative that the JAOB Director coordinate closely with the Project Manager to ensure air resources are tasked with missions that fall within the scope of work of the Mission Assignment as well as within the funds available. For more information on the Region VII Mission Assignment process please refer to the Region VII Mission Assignment SOP.

5.0 Oversight, Coordination Instructions, and Communications

1. The Interagency Aviation Communications Plan

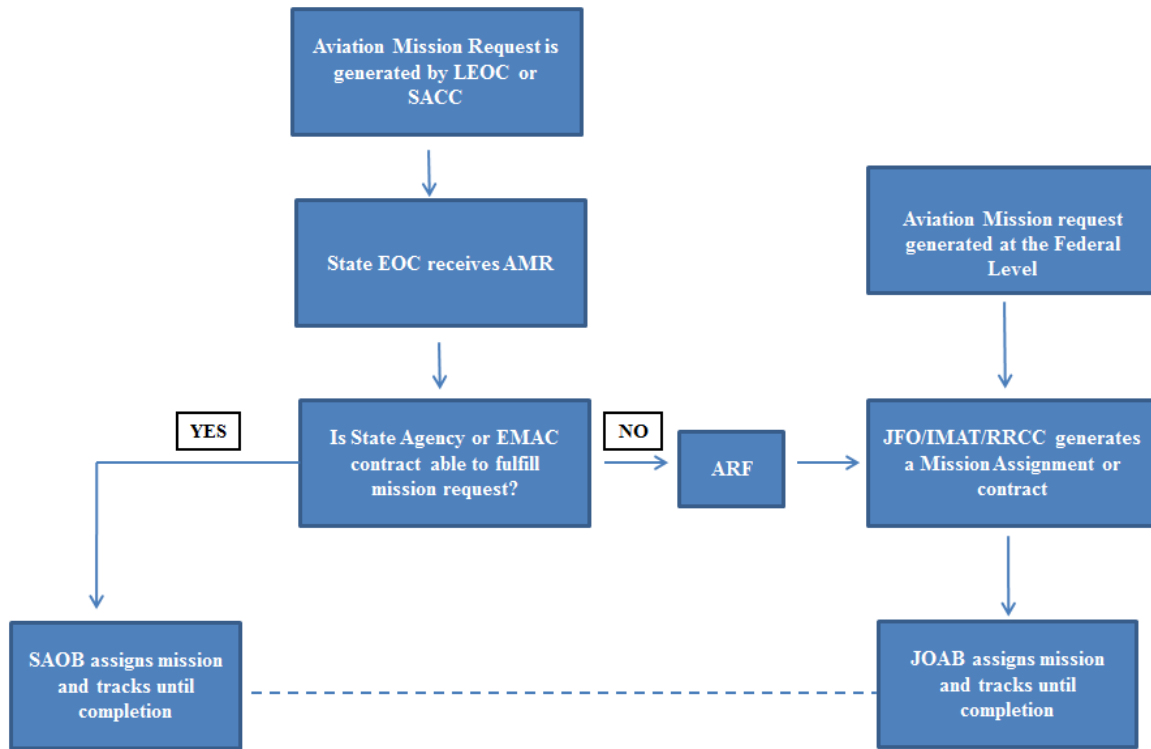
- a. The Interagency Aviation Communications Plan is intended to provide a template to augment the State aviation planning process. This plan identifies basic guidelines for effective communications for aviation operations during a disaster.
- b. Keep plan as simple and concise as possible.
- c. Augment local and State communications plans currently in effect.
- d. Identify additional frequency resource support that can be utilized.
- e. All communications should be in clear text. This includes radio, briefings, and all command functions. Acronyms and abbreviations should not be used.
- f. A current copy of the Incident Radio Communication Plan, ICS Form 205, will be in the IAP.
- g. Conserve radio frequency resources in the event of area or geographic separation of aviation operations.
- h. All aircraft should have compatible communications capabilities.
- i. All requests for radio frequency assignments will be coordinated with the SEOC Operations Section Emergency Communications Branch, the ESF-2 Wireless Unit Leader, when deployed, or directly with the National Telecommunications and Information Administration (NTIA) and FAA. The FCC will be engaged when private airfields are involved.

6.0 Aviation Mission Request and Assignment Process

1. The aviation request and assignment process uses ICS concepts and principles at all levels. The supported agency will identify the specific parameters of the request (e.g., cargo, timeline, origination

location pickup and destination), and the supporting agency will be responsible for sourcing and tasking the appropriate air assets to accomplish this request.

Figure 5: Aviation Mission Request Flow



2. State Emergency Operation Center

- a. Receive and validate an aviation request (the original request or shortfall from an ICP).
- b. Coordinate with the SAOB the State air asset or EMAC asset to accomplish the mission or submit the aviation request via an Action Request Form (ARF) to the Region VII RRCC/JFO for action and communicate the status of the request to the requestor. For disapproved requests, coordinate this information with the requestor only.

3. Initial Operation Facility/Joint Field Office

- a. Receive and validate ARFs from the SEOC or aviation requests from any Federal agency.
- b. Coordinate the aviation request with the Operations Section Chief, JOAB, Logistics, ESFs, and FEMA HQ Movement Coordination Center (MCC) to determine whether internal FEMA resources or Federal assets at the regional level are available to meet the request.

4. NRCC Support to the incident

- a. Receive and validate the aviation request (shortfall from the IOF/JFO).
- b. Fill the aviation request with a Federal asset (via a mission assignment) or contract with a civilian organization (via a memorandum of understanding) and communicate the status to the JFO/IOF.

Glossary of Terms

1. Aeromedical Evacuation (AE)

The movement of patients under medical supervision to and between medical treatment facilities by air transportation.¹

2. Air Force Rescue Coordination Center (AFRCC)

The Air Force Rescue Coordination Center (AFRCC) executes the Continental United States inland Search and Rescue (SAR) for the Inland SAR Coordinator (1AF/CC) as the SAR Mission Coordinator (SMC) and is embedded in the 601 Air and Space Operations Center, Tyndall AFB, FL. The Joint Forces Air Component Commander (JFACC) establishes a Joint Personnel Recovery Center (JPRC), as required.

3. Air Traffic Control Service

A service provided for the purpose of the following: a. preventing collisions: (1) between aircraft and (2) on the maneuvering area between aircraft and obstructions; and b. expediting and maintaining an orderly flow of air traffic.²

4. Command and Control

The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.³

5. Company Aircraft

An aircraft owned by a corporation, a private business, a non-profit organization, or union that is not engaged in public commercial aviation purposes or for hire to the general public.⁴

6. Contingency Response Air Support Schedule (CRASS)

The CRASS is used for the benefit of all agencies flying in support to civil authority operations. The CRASS is a visibility document for all participating aircraft operating in the airspace control area, to include both Joint Forces Commander (JFC) and non-JFC assets. The CRASS will include all unclassified DoD/Interagency missions, as well as planned flying by other agencies (e.g., Local Enforcement Agency [LEA], Title 32 ANG, etc). The fidelity of this product is highly dependent on the information provided by non-DoD agencies/organizations. It will be published using a common application (Excel), ensuring the ability to manipulate data, and requires increased coordination with State EOCs/LEA/other agencies to ensure accuracy. The CRASS can be accessed online at <http://1afnorth.region1.ang.af.mil/default.aspx>.

¹ Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, October 17, 2008

² Federal Aviation Administration, *Pilot/Controller Glossary*, March 12, 2009

³ Joint Publication 1, *Joint Doctrine for the Armed Forces of the United States*, March 20, 2009

⁴ Department of Homeland Security Management Directive System MD Number: 0020.1, *Aviation Management and Safety*, February 22, 2005

7. Coordinate

To systematically advance an analysis and exchange of information among principals who have or may have a need to know certain information to carry out specific incident management responsibilities.⁵

8. Defense Coordinating Officer (DCO)

Individual who serves as the Department of Defense's (DoD's) single point of contact at the Joint Field Office (JFO) for requesting assistance from DoD. With few exceptions, requests for Defense Support of Civil Authorities originating at the JFO are coordinated with and processed through the DCO. The DCO may have a Defense Coordinating Element (DCE) consisting of a staff and military liaison officers to facilitate coordination and support to activated Emergency Support Functions.⁶

9. Defense Support of Civil Authorities (DSCA)

Support provided by U.S. military forces (Regular, Reserve, and National Guard), DoD civilians, DoD contract personnel, and DoD agency and component assets in response to requests for assistance from civilian federal, state, local, and tribal authorities for domestic emergencies, designated law enforcement support, and other domestic activities.⁷

10. Emergency Management Assistance Compact (EMAC)

EMAC is a congressionally ratified organization that provides form and structure to interstate mutual aid. Through the EMAC, a disaster-affected state can request and receive assistance from other member states quickly and efficiently, resolving two key issues up front: liability and reimbursement.⁸

11. Federal Coordinating Officer (FCO)

The official appointed by the President to execute Stafford Act authorities, including the commitment of FEMA resources and mission assignment of other federal departments or agencies. In all cases, the FCO represents the FEMA Administrator in the field to discharge all FEMA responsibilities for the response and recovery efforts underway. For Stafford Act events, the FCO is the primary federal representative with whom the State Coordinating Officer and other state, tribal, and local response officials interface to determine the most urgent needs and set objectives for an effective response in collaboration with the Unified Coordination Group.⁹

12. First Air Force (AFNORTH, CONR, 1 AF)

Headquartered at Tyndall Air Force Base, near Panama City, Florida, 1st Air Force (1AF) is assigned to Air Combat Command (ACC). It has the responsibility of ensuring the air sovereignty and air defense of the continental United States. As the Continental United States geographical component of the bi-national North American Aerospace Defense Command, it provides airspace surveillance and control and directs all air sovereignty activities for the continental United States.

⁵ National Response Framework, January 2008

⁶ National Response Framework, January 2008

⁷ National Response Framework, January 2008

⁸ National Response Framework, January 2008

⁹ National Response Framework, January 2008

13. Flight Following

See Traffic Advisories.¹⁰

14. Incident Command System (ICS)

A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is a management system designed to enable effective incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.¹¹

15. Joint Field Office (JFO)

The primary Federal incident management field structure. The JFO is a temporary Federal facility that provides a central location for the coordination of federal, state, tribal, and local governments and private-sector and nongovernmental organizations with primary responsibility for response and recovery. The JFO structure is organized, staffed, and managed in a manner consistent with National Incident Management System principles and is led by the Unified Coordination Group. Although the JFO uses an Incident Command System structure, the JFO does not manage on-scene operations. Instead, the JFO focuses on providing support to on-scene efforts and conducting broader support operations that may extend beyond the incident site.¹²

16. Maximum on Ground (MOG)

Maximum number of aircraft an airfield can have on the ground.¹³

17. Movement Coordination Center (MCC)

Coordinates acquisition of transportation capacity and maintains visibility over validated transportation requests for assistance from inception through delivery to a mobilization center.

18. Multiagency Coordination (MAC) Group

Typically, administrators/executives, or their appointed representatives, who are authorized to commit agency resources and funds, are brought together and form MAC Groups. MAC Groups may also be known as multiagency committees, emergency management committees, or as otherwise defined by the system. A MAC Group can provide coordinated decision-making and resource allocation among cooperating agencies, and may establish the priorities among incidents, harmonize agency policies, and provide strategic guidance and direction to support incident management activities.¹⁴

¹⁰ Federal Aviation Administration, *Pilot/Controller Glossary*, March 12, 2009

¹¹ *National Response Framework*, January 2008

¹² *National Response Framework*, January 2008

¹³ Joint Deployment Training Center, *Frequently Asked Questions*, No Date

¹⁴ *National Response Framework*, January 2008

19. Multiagency Coordination System(s) (MACS)

Multiagency coordination systems provide the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination. The elements of multiagency coordination systems include facilities, equipment, personnel, procedures, and communications. Two of the most commonly used elements are emergency operations centers and MAC Groups. These systems assist agencies and organizations responding to an incident.¹⁵

20. Multijurisdictional Incident

An incident requiring action from multiple agencies that each have jurisdiction to manage certain aspects of the incident. In the ICS, these incidents will be managed under Unified Command.¹⁶

21. Mutual Aid and Assistance Agreement

Written or oral agreement between and among agencies/organizations and/or jurisdictions that provides a mechanism to quickly obtain emergency assistance in the form of personnel, equipment, materials, and other associated services. The primary objective is to facilitate rapid, short-term deployment of emergency support prior to, during, and/or after an incident.¹⁷

22. National Airspace System (NAS)

The common network of United States airspace; air navigation facilities, equipment and services, airport or landing areas; aeronautical charts, information and services; rules, regulations and procedures, technical information, and manpower and material. Included are system components shared jointly with the military.¹⁸

23. National Response Framework (NRF)

Guides how the nation conducts all-hazards response. The Framework documents the key response principles, roles, and structures that organize national response. It describes how communities, states, the federal government, and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response. And it describes special circumstances where the federal government exercises a larger role, including incidents where federal interests are involved and catastrophic incidents where a state would require significant support. It allows first responders, decision makers, and supporting entities to provide a unified national response.¹⁹

24. Non-Governmental Organization (NGO)

An entity with an association that is based on interests of its members, individuals, or institutions. It is not created by a government, but it may work cooperatively with government. Such organizations serve a public purpose, not a private benefit. Examples of NGOs include faith-based charity organizations and the American Red Cross. NGOs, including voluntary and faith-based groups, provide relief services to sustain life, reduce physical and emotional distress, and promote the recovery of disaster victims. Often these groups provide specialized services that help individuals

¹⁵ *National Response Framework*, January 2008

¹⁶ *National Response Framework*, January 2008

¹⁷ *National Response Framework*, January 2008

¹⁸ Federal Aviation Administration, *Pilot/Controller Glossary*, March 12, 2009

¹⁹ *National Response Framework*, January 2008

with disabilities. NGOs and voluntary organizations play a major role in assisting emergency managers before, during, and after an emergency.²⁰

25. Operational Control (OPCON)

Those functions of common authoritative direction involving the composition of subordinate forces, the assignment of tasks, and the designation of objectives necessary to accomplish the mission. It does not include administrative, discipline, internal organization, and unit training except when a subordinate commander requests assistance. Inherent in operational control is the authority to assign tactical control.²¹

26. Operational Control

With respect to a particular flight, the exercise of authority over initiating, conducting, or terminating that flight.

27. Private Aircraft

Aircraft owned by an individual, or group of individuals, and which is not engaged in commercial aviation activities or for hire to the general public.²²

28. Private Sector

Organizations and entities that are not part of any governmental structure. The private sector includes for-profit and not-for-profit organizations, formal and informal structures, commerce, and industry.²³

29. Special Needs Population

Populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to: maintaining independence, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures; who have limited English proficiency or are non-English speaking; or who are transportation disadvantaged.²⁴

30. Staging Area

Any location in which personnel, supplies, and equipment can be temporarily housed or parked while awaiting operational assignment.²⁵

²⁰ *National Response Framework*, January 2008

²¹ Department of Homeland Security Management Directive System MD Number: 0021, *Aviation Concept of Operations*, April 18, 2005

²² Department of Homeland Security Management Directive System MD Number: 0020.1, *Aviation Management and Safety*, February 22, 2005

²³ *National Response Framework*, January 2008

²⁴ *National Response Framework*, January 2008

²⁵ *National Response Framework*, January 2008

31. Strategic Airlift

Long-haul, large aircraft originating outside the event area, and after pickup or drop off of their cargo inside the event area, departing the event area.

32. Tactical Airlift

Short-haul smaller aircraft operating entirely within the event area.

33. Tactical Control (TACON)

Used in the execution of operations and defined as the detailed and usually local direction and control of movement or maneuvers necessary to accomplish missions or tasks assigned. TACON is subordinate to OPCON.²⁶

34. Temporary Flight Restrictions (TFR)

A restriction requested by an agency and put into effect by the FAA in the vicinity of an incident restricting the operation of nonessential aircraft in the airspace around that incident.

35. Traffic Advisories

Advisories issued to alert pilots to other known or observed air traffic which may be in such proximity to the position or intended route of flight of their aircraft to warrant their attention. Such advisories may be based on: Visual observation. Observation of radar identified and unidentified aircraft targets on an ATC radar display, or verbal reports from pilots or other facilities.²⁷

36. Urban Search and Rescue (US&R) Task Forces

A framework for structuring local emergency services personnel into integrated disaster response task forces. The 28 National US&R Task Forces complete with the necessary tools, equipment, skills, and techniques, can be deployed by the FEMA to assist state and local governments in rescuing victims of structural collapse incidents or to assist in other search and rescue missions.²⁸

²⁶ Department of Homeland Security Management Directive System MD Number: 0021, *Aviation Concept of Operations*, April 18, 2005

²⁷ Federal Aviation Administration, *Pilot/Controller Glossary*, March 12, 2009

²⁸ *National Response Framework*, January 2008

Acronyms and Abbreviations

1 st AF	First Air Force
AE	Aeromedical Evacuation
AFNORTH	Air Forces Northern (under NORTHCOM)
AFRCC	Air Force Rescue Coordination Center
AFSS	Automated Flight Service Station
AGL	Above Ground Level
AMC	Air Mobility Command
AMLO	Air Mobility Liaison Officer
AMR	Air Mission Request
ANS	Air Navigation Services
ANSP	Air Navigation Services Provider
AOB	Air Operations Branch
AOC	Air Operations Center
AOR	Area of Responsibility
ARF	Action Request Form
ARTCC	Air Route Traffic Control Center
ASRR	Airfield Suitability and Restrictions Report
ATA	Airline Transport Association
ATA	Actual Time of Arrival
ATC	Air Traffic Control
ATCT	Airport Traffic Control Tower
ATD	Actual Time of Departure
ATM	Air Traffic Management
ATO	Air Tasking Order
CAP	Civil Air Patrol
CAPNOC	Civil Air Patrol National Operations Center
CBP	Customs and Border Protection
COA	Certificate of Waiver or Authorization
COA	Course of Action
CONR	Continental United States North American Aerospace Defense Command Region
CONUS	Continental United States
CRASS	Contingency Response Air Support Schedule
CRE	Contingency Response Element
CWN	Call When Needed (helicopter services)
DHS	Department of Homeland Security
DME	Distance Measuring Equipment
DOA	Department of Agriculture
DOC	Disaster Operations Center
DoD	Department of Defense
DOI	Department of the Interior
DOJ	Department of Justice

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DOT	Department of Transportation
DSCA	Defense Support of Civil Authorities
DV	Distinguished Visitor
EATPL	ESCAT Air Traffic Priority List
EMAC	Emergency Management Assistance Compact
EMS	Emergency Medical Service
EOC	Emergency Operations Center
EPLO	Emergency Preparedness Liaison Officer
ESCAT	Emergency Security Control of Air Traffic
ESF	Emergency Support Function
ETA	Estimated Time of Arrival
ETB	Estimated Time Aircraft Will be on Blocks
ETD	Estimated Time of Departure
ETE	Estimated Time Enroute
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FBO	Fixed-Based Operators
FCC	Federal Communications Commission
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FM	Frequency Modulated
FRD	Federal Aviation Administration Recovery Desk
FS	Forest Service
FSDO	Flight Standards District Office
FSS	Flight Service Station
F/W	Fixed-Wing
GARS	Global Area Reference System
GMT	Greenwich Mean Time
GSA	General Services Administration
HAZMAT	Hazardous Materials
HF	High Frequency
IAA	Interagency Airspace Agreement(s)
IAA	Incident Awareness and Assessment
IAP	Incident Action Plan
IC	Incident Command(er)
ICP	Incident Command Post
ICS	Incident Command System
ID	Identifier
IOF	Initial Operating Facility
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Conditions
IMAT	Incident Management Assessment Team (FEMA)
JFO	Joint Field Office
JIC	Joint Information Center
JAOB	Joint Air Operations Branch

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LE	Law Enforcement
LEA	Local Enforcement Agency
LEOC	Local Emergency Operations Center
LNO	Liaison Officer
MA	Mission Assignment
MAP	Mutual Aid Plan
MOA	Memorandum of Agreement
MoANG	Missouri Air National Guard
MoDOT	Missouri Department of Transportation
MOG	Maximum on Ground
MoNG	Missouri Army National Guard
MOU	Memorandum of Understanding
MSHP	Missouri State Highway Patrol
MSL	Mean Sea Level
NAS	National Airspace System
NAVAIDS	Air Navigation Aids
NDB	Non-Directional Beacon
NGO	Non-Governmental Organization
NICC	National Infrastructure Coordination Center
NIMS	National Incident Management System
NMSZ	New Madrid Seismic Zone
NORAD	North American Aerospace Defense Command
NOTAM	Notice to Airmen
NORTHCOM	United States Northern Command
NRF	National Response Framework
OPLAN	Operations Plan
PKEMRA	Post-Katrina Emergency Management Reform Act
RFA	Request for Assignment
ROC	Regional Operations Center
RRCC	Regional Response Coordination Center
R/W	Rotary Wing
SAOB	State Air Operations Branch
SAR	Search and Rescue
SCA	Security Control Authorization
SCATANA	Security Control of Air Traffic and Navigation Aids
SEMA	State Emergency Management Agency
SEOC	State Emergency Operations Center
SUA	Special Use Airspace
TACAN	Tactical Air Navigation Aid
TC	Transportation Command
TFR	Temporary Flight Restrictions
TRANSCOM	Transportation Command
TRSA	Terminal Radar Service Area
UAS	Unmanned Aircraft System
UC	Unified Command(er)

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UHF	Ultra High Frequency
USA	United States Army
USAF	United States Air Force
USARNORTH	United States Army North (under NORTHCOM)
USCG	United States Coast Guard
USFS	United States Forest Service
USN	United States Navy
USNG	United States National Grid
USTRANSCOM	United States Transportation Command
UTC	Universal Time Converted
UTM	Universal Transverse Mercator
VFR	Visual Flight Rules
VHF	Very High Frequency
VMC	Visual Meteorological Conditions
VOR	Very High Frequency Omni-directional Radio-range
VORTAC	Very High Frequency Omni-directional Radio-range- Tactical Air Navigation Aid
WGS-84	World Geodetic System of 1984

Appendix 1: Directory

This list should be built and updated upon activation for an incident.

Agency	E-mail	Phone
Interagency Coordination Centers		
Applicable State Offices		
Applicable Federal Offices		
County Emergency Management Offices		
FEMA Emergency Numbers		
Law Enforcement (LE)		
Airports		
National Guard		
Military Bases (DoD Restricted Airspace)		
Media Helicopter Operations		
Hospital/Medivac		
Search and Rescue		
Operational Helibases		
Incident Command Posts		
JFO Aviation Branch		
FAA ATC Facility		
FAA Air Route Traffic Control Center (ARTCC)		
FAA's Crisis Operations Response Desk (CORD)		
FAA Recovery Desk (FRD)		
FAA Flight Service Station (FSS)		
FAA Flight Standards District Office (FSDO)		
FAA Command Centers		
FAA Airport Towers		
Hospitals/Life Flight		
Appropriate Military Units (DoD and National Guard)		
USFS Regional Office		
USFS Geographical Area Coordination Center		
DOI — Aviation Management Directorate		
U.S. Coast Guard		
Appropriate Law Enforcement Officials		

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Agency	E-mail	Phone
Environmental Protection Agency		
U.S. Customs		
Civil Air Patrol National Operations Center	opscenter@capnhq.gov	REDACTED
FEMA Regional Response Coordination Center		REDACTED
Joint Field Office		
Appropriate DOI Agencies		
Critical Incident Management Organization		
NRCC		

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Appendix 2: Airport Assessment Checklist

Airport Status	Name Designator	Location: Elevation:
	Describe the current condition of facilities:	
	Ascertain whether the airport is fully operational. Daylight hours only?	
	Furnish information on usable runway lengths and locations:	
	Determine whether taxiways, parking areas, and cargo handling areas are intact:	
	Establish whether runway and approach lights are operating:	
	Specify which navigational aids are operating:	
	Describe available communications facilities:	
	Determine whether the terminal building is operating:	
	Check the availability of aviation fuel:	
	Find out if facilities exist for mandatory aircrew rest:	
	Explore whether the cargo handling area can be lit for night cargo operations:	
	Determine what cargo handling equipment is available:	
	Fuel Availability and operators:	
	Forklifts (number, capacity):	
	Scissors lift (capacity):	
	Cargo dollies (number):	
	Trucks with drivers and laborers for hand unloading:	
	Describe maintenance operations (facilities, personnel, hours).	
	Outline what storage is available: <ul style="list-style-type: none">▪ Covered?▪ At the airport? Off airport? How far? Capacity and suitability for storage of foods or other perishables?	
G	Fully Mission Capable; able to support Airport Operations	
Y	Degraded or Partially Mission Capable; able to support some or most Air Ops	
R	Significantly Degraded; Non Mission Capable; Unable to support Air Operations	

We recognize the color chart provides for subjective determination of your capabilities, hence details on the status of the airport are important.

Appendix 3: Logistics and Cargo Considerations

1. Introduction

In the response and recovery operations for a catastrophic earthquake incident, aircraft will be needed to support disaster operations. While many aircraft may come from the MONG, DoD other federal agency aircraft and commercial aviation assets may also be required to assist in the recovery efforts, such as the CAP and private freight carriers.

a. Points to Consider when Dealing with Aircraft

1. Whenever possible, store all materials to be airlifted in containers (e.g., suitcases, backpacks, and metal and cardboard boxes) for rapid handling and stacking on pallets.
2. Ensure all individual containers are small enough to fit through passenger doors of commercial aircraft in case cargo space is not available.
3. Package personal gear (e.g., in a pack or suitcase) with the owner's name clearly marked for rapid customs processing.
4. Mark packages containing hazardous materials or chemicals and separate them from all other cargo, so they can be left behind if they are refused by the carrier.
5. Ensure individual pieces of personal cargo do not weigh more than 200 pounds to enable them to be moved by two people.
6. Each employee, that may be flying, is responsible for his or her personal luggage.
7. Follow crew duty day and flight times. Aircraft at your disposal are not an unlimited resource.
 - (a) It is vital to remember that a crew duty day is not based solely on flight time. While flight time is a factor in determining a crew's duty day, the duty day generally begins with the start of crew related activities (i.e. a pre-flight or weather briefing) and ends after crew related activities cease. Each participating agency and organization will have different definitions and limitations for their duty days. For your planning purposes, find out the flight crew's duty day and flight time limitations for each air crew assigned.

b. Aircraft Loading and Offloading Methods

1. Aircraft can be loaded in four ways:

(a) Bulk-loaded

Cargo is loaded on the floor and held in place by nets, straps, or ropes. Bulk loading may increase the usable cargo space on an aircraft, but securing cargo in place may be more difficult than palletizing. Depending on the offloading equipment at the destination airport, bulk loading may be the best loading option.

(b) Palletized

Cargo is preloaded onto pallets; held in place by nets, straps, or ropes; and then loaded onto the aircraft. Palletizing cargo is a frequently used method of moving large amounts of emergency supplies. Military and commercial aircraft can use pallets.

(c) Containerized

Containerizing cargo is a method used to load the belly of commercial aircraft, such as 747s and DC-10s. Cargo is preloaded into closed containers and then loaded onto the aircraft. Cargo containers come in a variety of shapes and sizes, and the maximum loaded weights for containers used on aircraft can range from 200 to 10,000 lb. Each type of container is designed to be loaded and offloaded with cargo in place using a mechanized loading system or a forklift. If a forklift will be used to load or offload containers or pallets, make sure the forklift can carry the largest pallet, has tines long enough to counterbalance the weight, and the highest point of the forklift is lower than that portion of the aircraft (wing, tail, or door in open position) where it must move to retrieve the container or pallet.

(d) External (helicopters only)

Cargo is placed in a net or suspended from a line, and then picked up and moved by the helicopter using a belly hook. External (sling) loading of cargo is performed with helicopters. Helicopters normally can lift and move less cargo externally than internally. The external cargo is loaded into specially made nets connected to a cargo hook on the belly of the helicopter. Cargo may also be suspended on cables (lead lines). Make sure lead lines and nets are approved for slinging cargo. Remember pallets, containers, nets, and lead lines are reusable and may also need to be returned quickly to their points of origin to be used for loading more cargo. Always think in terms of backhauling cargo equipment for reuse or when no longer needed.

c. Points to Consider when Planning to Receive Aircraft Cargo

1. Where is the cargo going for a final destination?
2. Ramp space for parking the aircraft
 - (a) If no ramp space is available, the cargo will have to be unloaded on the active runway. Consider offloading time and the schedules of other aircraft arrivals.
3. The weight of the loaded aircraft and the ability of the ramp to support parked aircraft.
4. Availability of trucks and laborers if the aircraft will be manually offloaded
 - (a) Remember, planes may arrive at all hours.
5. Availability of correctly sized offloading equipment
6. Storage space near the ramp if the commodities will be stored close to the offloading point.
 - (a) Consider whether the location of the storage area will cause security problems.

d. Points to Consider when Planning Outbound Aircraft or Surface Transportation Cargo

1. Where is the cargo going for a final destination?
2. Load planning
3. Inspection and cargo manifesting requirements
4. Weight and balance requirements for aircraft
5. Hazmat handling requirements

e. The following tables list some of the fixed-wing and rotary aircraft that could be used following a catastrophic earthquake. The purpose of these tables is to assist in planning for the movement of

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people and commodities. Note however, these figures represent approximate aircraft specifications. Specifications for each aircraft will vary based on individual aircraft configurations and ratings, operating range, runway conditions, temperature, altitude, wind speed, and direction. Always check with local aviation authorities about which types of aircraft can operate in and out of local airports.

Table 1: General Cargo Capacities of Fixed and Rotary Wing Aircraft

Aircraft Type	Useful Load (Cargo Plus Crew)	Preferred Runway Distance (feet)	Speed	Range
Airbus 300-100	88,800 lbs	8,200	472 knots	2,600 nm
Airbus 300-600	121,290 lbs	8,200	484 knots	2,600 nm
Airbus 300 B2/B4	168,651 lbs	8,200	457 knots	2,900-3,400 nm
Airbus 310	151,670 lbs	6,700	459 knots	3,600-5,100 nm
Beech 33 Bonanza	1,400 lbs	2,500	165 knots	900 nm
Beech 36 Bonanza	2,000 lbs	2,500	165 knots	900 nm
Beech Baron	1,800 lbs	3,000	190 knots	1,500 nm
Beech Queen Air	3,500 lbs	3,000	200 knots	1,000 nm
Beech King Air	3,500 lbs	3,000	260 knots	1,200 nm
Boeing 727-100	35,200 lbs	7,000	549 knots	2,700 nm
Boeing 737-200	26,400 lbs	7,000	500 knots	1,900 nm
Boeing 747-200	217,800 lbs	9,000	522 knots	4,900 nm
Boeing 757-200	85,800 lbs	6,000	493 knots	3,700 nm
Boeing 767-300	121,000 lbs	6,500	493 knots	6,670 nm
Canadair RJ	22,700 lbs	5,000	459 knots	2,000 nm
Cessna 172	900 lbs	2,000	100 knots	730 nm
Cessna 182	1,100 lbs	2,000	110 knots	900 nm
Cessna 206	1,400 lbs	2,000	140 knots	988 nm
Cessna 208	3,300 lbs	2,000	180 knots	900 nm
Cessna 310	2,200 lbs	2,000	200 knots	1,500 nm
Cessna Citation	5,200 lbs	3,000	350 knots	1,300 nm
Dassault Falcon	18,400 lbs	3,000	475 knots	3,000 nm
Douglas DC-8	22,000 lbs	6,000	500 knots	6,000 nm
Gulfstream	40,700 lbs	6,000	460 knots	4,000 nm
Hawker	11,000 lbs	6,000	390 knots	1,600 nm
Lockheed C-130	36,000 lbs	3,000	300 knots	3,000 nm
MD DC-10	123,000 lbs	8,000	530 knots	4,000 nm
Pilatus PC-12	4,100 lbs	2,000	270 knots	1,600 nm
Piper Cherokee	800 lbs	2,000	128 knots	400 nm
Piper Arrow	960 lbs	2,000	130 knots	400 nm
Piper Saratoga	1,200 lbs	2,000	150 knots	500 nm
Piper Meridian	1,500 lbs	2,500	265 knots	900 nm

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Aircraft Type	Useful Load (Cargo Plus Crew)	Preferred Runway Distance (feet)	Speed	Range
SEOCata TBM	2,447 lbs	2,500	290 knots	1,300 nm

Table 2: Capacities of Rotary Aircraft

Aircraft Type	Useful Load	Speed	Range
Bell 204/212	900-1,200 lbs	120 knots	300 nm
Bell 206	700-900 lbs	100 knots	385 nm
Bell 412	5,000 lbs	130 knots	400 nm
Boeing CH-47	26,900 lbs	130 knots	400 nm
Eurocopter Dauphin	5,800 lbs	150 knots	600 nm
Eurocopter EC-135	3,100 lbs	140 knots	474 nm
MD 500	1,400 lbs	125 knots	325 nm
MD 530	2,100 lbs	135 knots	232 nm
MD 520 N	2,200 lbs	135 knots	229 nm
MD 600	2,600 lbs	135 knots	380 nm
Sikorsky S-76	6,000 lbs	155 knots	400 nm
Sikorsky UH-60	9,000 lbs	145 knots	400 nm

Appendix 4: Passenger and Evacuation Considerations

1. Introduction

In the response and recovery operations for a catastrophic earthquake incident, aircraft may be needed to support the evacuation of tourists, visitors, or survivors. Generally speaking, ticketed passengers and non-ticketed evacuees are handled separately. The handling of non-ticketed passengers for evacuation is a highly complex operation requiring coordination between multiple local, state, and federal agencies. The checklist below is a simplistic representation of the major points that need addressed.

2. Points to Consider When Dealing with Ticketed Passengers

- a. Airlines will operate in accordance with their business model.
- b. Air carriers can increase throughput but utilizing existing scheduled aircraft to capacity or by adding additional flights or a combination of both.
- c. Scheduling will be handled through their Operations Control Centers.
- d. Air carriers will consider the need for extra staffing to handle a passenger surge along with the possible need to evacuate their own employees.

3. Points to Consider when Dealing with Non – Ticketed Survivor Evacuations

- a. Establish local collection points to pick up survivors and move them by surface transportation to an evacuation hub.
- b. Screen survivors by categories such as:
 1. Families
 2. Special Needs
 3. Medical Special Needs
 4. Pets
- c. Security screening of survivors and baggage
- d. Manifesting
- e. Holding in a sterile area
- f. Coordinating arrival of contract commercial aircraft with arrival of survivors to the evacuation airport
- g. Transfer and loading of survivors and baggage to an aircraft
 1. Coordination with host airports, cities, and states for arrival and sheltering

Appendix 5: Missouri Aviation Resources

Table 1: Missouri Based Aircraft

Agency	Aircraft	Phone	Fax
Civil Air Patrol	5x C-182, 3x C-172, 1x GA8	REDACTED	REDACTED

Table 2: Federal Assets in Region VII

Company	Aircraft	Type	Phone	Fax

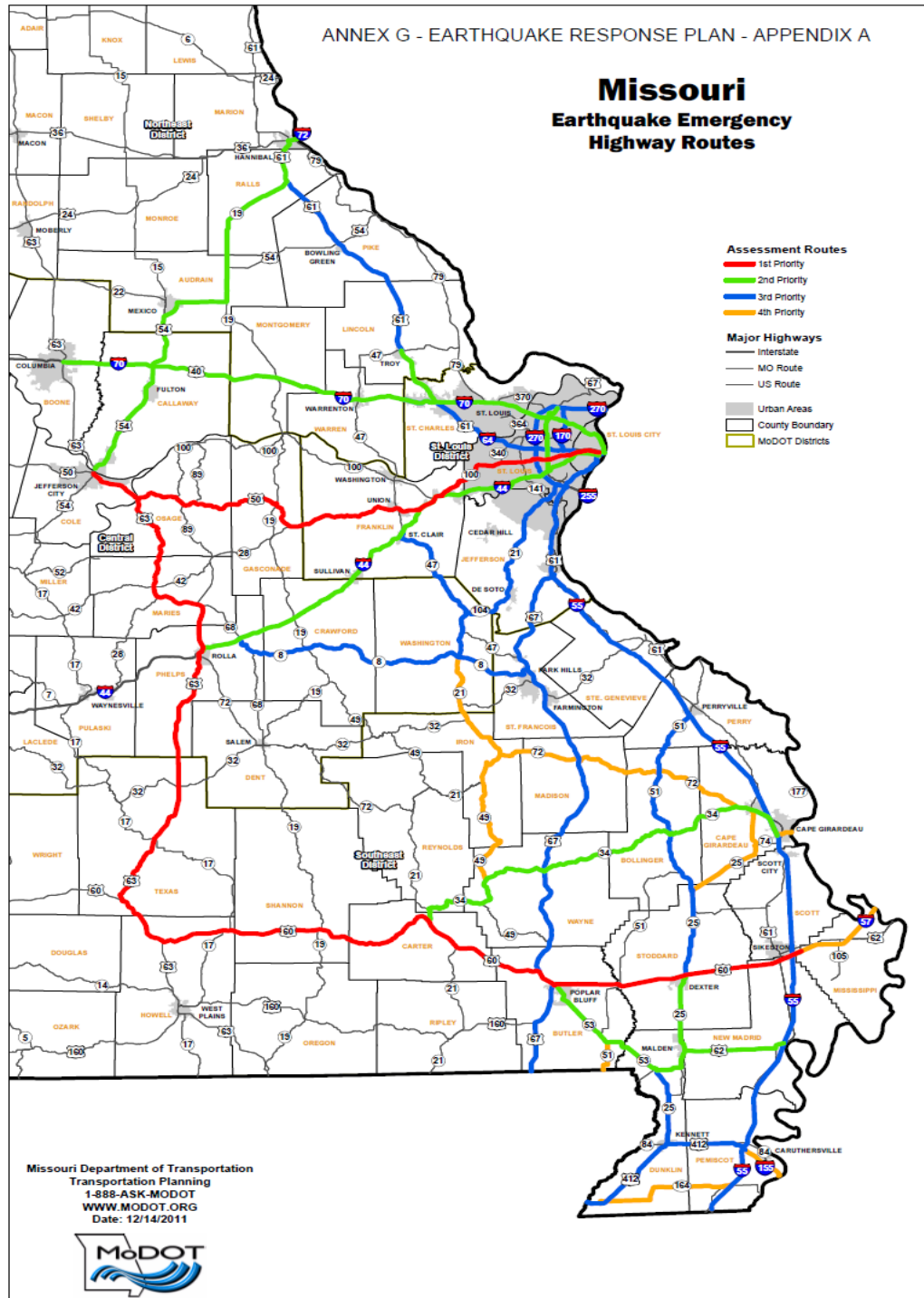
Table 3: EMAC Aircraft

Company	Aircraft	Type	Phone	Fax

**Appendix 6: Airline Operations Centers –
REDACTED**

Appendix 7: Missouri Priority Routes – REDACTED

Figure 1: Missouri Earthquake Emergency Highway Routes



Appendix 8: Disaster Airspace Management

Figure 1: **SAMPLE VFR Flight Rules (See & Avoid)**



Figure 2: Transition Corridors inside the Disaster Relief TFR – REDACTED

Appendix 9: Light Aircraft Commodity Airlift

Light aircraft airlift in to isolated or damaged airports

Estimated loads by commodities need to support 5000 people

NOTE: Information based on typical weights of commodity and amounts established by FEMA for disaster response

Table 1: Light Aircraft Commodity Airlift

Item	Amount to Support 5,000 People	Estimated Weight
Emergency Meals - (Heater Meals Plus)	10,000 meals (2 ea serves 5,000 people per day)	3 lb ea.
Emergency Meals - (Heater Meals)	10,000 meals (2 ea serves 5,000 people/day)	1.3 lb ea.
Emergency Meals -(MREs)	10,000 meals (2 ea serves 5,000 people/day)	1.1 lb ea.
Ice	5,000 8 lb bags 8 lbs/per person supports 5,000 people per day)	8 lb ea.
Water (Liters)	18,000 liters (3 liters per person per day supports 5,000 people per day)	2.2 lb/L
Plastic Sheeting, 20x100	616 rolls (1.5 per house, supports 400 houses with roof damage	71 lb ea.
Tarps (20x25)	2,500 (1 per household)	12 lb ea.
Tents	120 – 1,800 (6-8 person tents)	20 lb ea.
Blankets	4,500 (2 ea per person supports 2250 people)	3.3 lb ea.
Cots, Military	2,250 (1 ea per person supports 2,250 people)	14.1 lb ea.

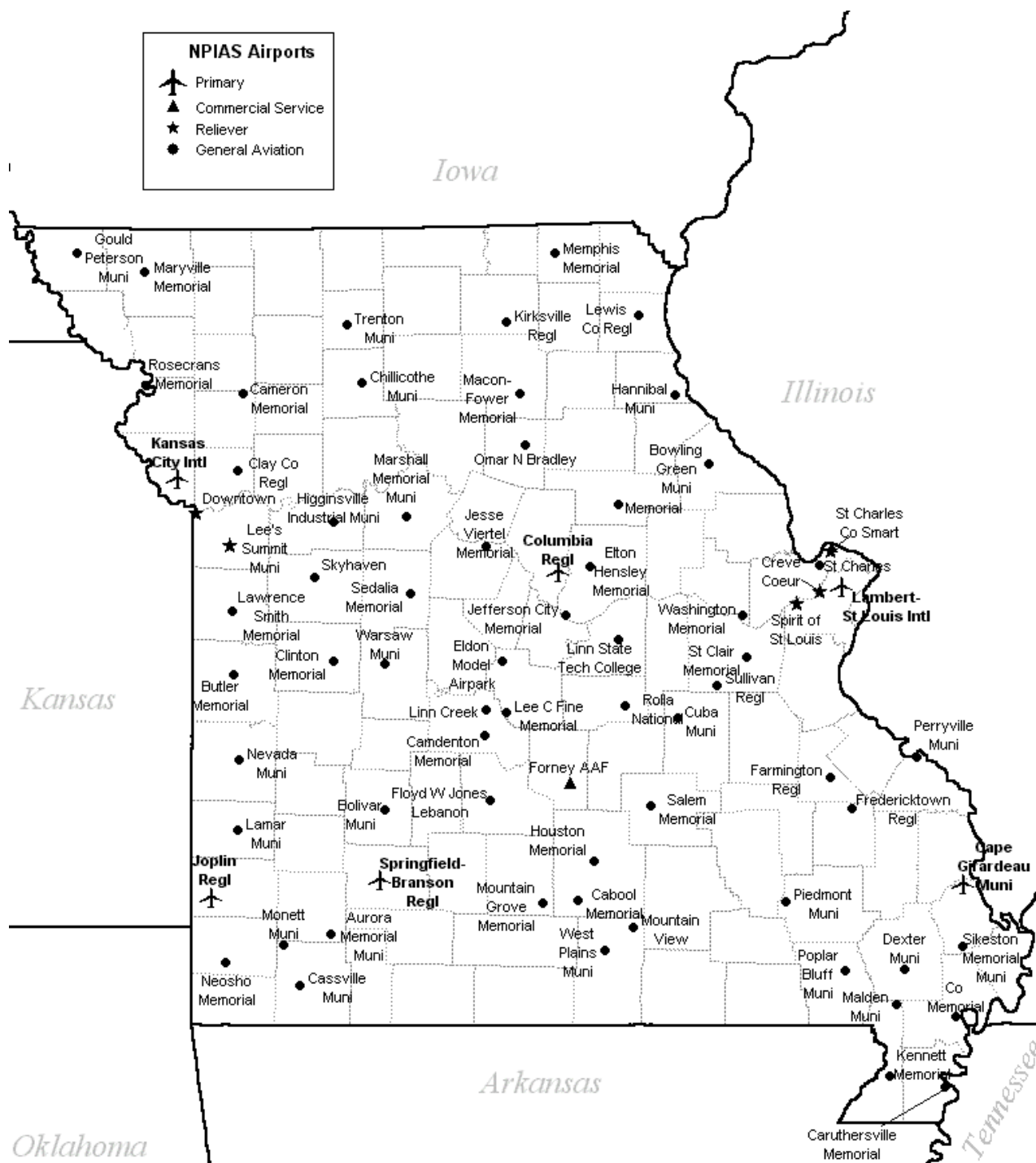
Appendix 10: Disaster Response Airports

Table 1: Missouri Disaster Response Airports

AIRPORTS AND PRIMARY USE (LISTED ALPHABETICALLY)			
NAME	ICAO	INFORMATION	USE
Columbia Regional	REDACTED	REDACTED	REDACTED
Jefferson City Memorial Airport	REDACTED	REDACTED	REDACTED
Kansas City International Airport	REDACTED	REDACTED	REDACTED
Kennett Memorial Airport	REDACTED	REDACTED	REDACTED
Lambert - St Louis International	REDACTED	REDACTED	REDACTED
Malden Airport	REDACTED	REDACTED	REDACTED
Poplar Bluff	REDACTED	REDACTED	REDACTED
Rolla National / Vichi	REDACTED	REDACTED	REDACTED
Rosecrans Memorial Airport	REDACTED	REDACTED	REDACTED
Sikeston Memorial Airport	REDACTED	REDACTED	REDACTED
Spirit of St. Louis – Chesterfield	REDACTED	REDACTED	REDACTED
Springfield Branson Airport	REDACTED	REDACTED	REDACTED
Sullivan Regional Airport	REDACTED	REDACTED	REDACTED
Waynesville - St. Robert Regional – Fort Leonard Wood	REDACTED	REDACTED	REDACTED
West Plains Municipal	REDACTED	REDACTED	REDACTED
Whiteman AFB	REDACTED	REDACTED	REDACTED

Joint Missouri & FEMA Region VII Plan

: Missouri Disaster Response Airports



REDACTED

Map – Columbia – Columbia Regional – COU – REDACTED
Map – Jefferson City – JRF – REDACTED
Map – Kansas City Int.l – MCI – REDACTED
Map – Kennett – Kennett Memorial – TKX – REDACTED
Map – St. Louis – Lambert – Saint Louis Int. – STL – REDACTED
Map – Malden – Malden Regional – MAW – REDACTED
Map – Popular Bluff Municipal – POF – REDACTED
Map – Rolla/Vichy – Rolla Nat. – VIH – REDACTED
Map – St. Joseph – Rosecrans Memorial – STJ – REDACTED
Map – Spirit of St. Louis Airport, Chesterfield, MO – SUS – REDACTED
Map – Springfield – Branson Naional – SGF – REDACTED
Map – Sullivan – Sullivan Regional – UUV – REDACTED
Map – Waynesville – Waynesville – St. Robert Regional – REDACTED
Map – West Plains – West Plains – Municipal – UNO – REDACTED

Kennett Memorial Airport, Kennett, MO – REDACTED
Lambert-St Louis Int. Airport, St Louis MO – REDACTED
Malden Regional Airport, Malden, MO – REDACTED
Rolla Nat. Airport, Rolla/Vichy, MO – REDACTED
Sikeston Memorial Airport, Sikeston, MO – REDACTED
Spirit of St Louis Airport, Chesterfield, MO – REDACTED
Sullivan Airport, Sullivan, MO – REDACTED

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Appendix 11: Forms

This appendix contains current and standardized examples of all forms necessary to support this operations manual. Use of these forms is intended to facilitate the prompt, efficient, and effective employment of aviation assets.

SAFECOM – Aviation Safety Communiqué – REDACTED

Temporary Flight Restriction Request Form – REDACTED

Interagency Air Mission Request – REDACTED

Initial Aviation Mission Briefing Checklist

1. Where to report and to whom
 - a. Copy of Daily Air Operations Plan
 1. Communication procedures
 2. Flight following procedures
 3. Aircraft check-in procedures
 4. Airspace coordination procedures (Special airspace restrictions)
 5. Organization chart
 6. Aircraft priorities
 7. Current situation update
 8. Reporting of out of service aircraft
 - b. Safety
 1. General safety issues
 2. Identified hazards or concerns
 3. Weather
 4. Overdue, missing, or crashed emergency procedures
 5. Mishap or SAFECOM reporting procedures
 - c. Administrative procedures
 1. Personnel logistics
 2. Conference call schedule
 3. Daily reporting requirements
 4. De-mobilization of aircraft or personnel
 - d. Materials to distribute to incoming personnel
 1. Communications plan
 2. Sectional of assigned area
 3. Current Air Operations plan
 4. Required maps and charts
 - e. Other local issues/logistics/information

REDACTED

Air Operations Annex E

Joint Missouri & FEMA Region VII Plan

Sortie Status Tracking Form – REDACTED

REDACTED

Air Operations Annex E

Joint Missouri & FEMA Region VII Plan

Incident Radio Communications Plan (ICS Form 205)

INCIDENT RADIO COMMUNICATIONS PLAN			1. Incident Name	2. Date/Time Prepared	3. Operational Period Date/Time
4. Basic Radio Channel Utilization					
Radio Type/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks
5. Prepared by (Communications Unit)					

State of Missouri

FEMA Region VII

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Air Operations Annex E

Joint Missouri & FEMA Region VII Plan

Air Operations Summary (ICS Form 220)

AIR OPERATIONS SUMMARY		1. Incident Name		2. Operational Period (Date/Time)		3. Distribution <input type="checkbox"/> Helicopters <input type="checkbox"/> Fixed Wing Base			
4. Personnel and Communications	Name	Air/Air Frequency		Air/Ground Frequency		5. Remarks (Spec. Instructions, Safety Notes, Hazards, Priorities)			
Air Operations Branch Director									
Air Mission Group Supervisor									
Air Support Group Supervisor									
6. Location/Function	7. Assignment	8. Fixed Wing		9. Helicopters		10. Time		11. Aircraft	12. Operating
		No.	Type	No.	Type	Available	Commence	Assigned	Base
13. Totals									
14. Air Operations Support Equipment						15. Prepared by (include Date and Time)			
ICS 220-FEMA									

State of Missouri

FEMA Region VII

Appendix 12: Damaged Airfield Considerations

1. In the event of a catastrophic NMSZ earthquake where widespread and severe infrastructure damage is expected consideration needs to be given to partial airport operations.
 - a. The runway may be partially damaged but usable, thereby reducing effective runway length
 - b. If the Control Tower sustains damage, tailor aircraft coordination accordingly e.g. tailor communication and coordination plan accordingly (aircraft operate on Unicom? Coordinate through ICP? Etc.)
 - c. Damage to Airport Navigational Aids, Runway Lighting and the effects on operations
 - d. Damage to the parking apron and taxiways (effects on parking and working MOG)
 - e. Damage affecting aircraft services e.g. logistics (equipment and facilities), fuels, CFR, etc.
 - f. Damage to the passenger terminals to include the passengers at the airport during the incident
 - g. Time of Day of the incident

NOTE: Airports tend to be natural “rallying” points for survivors after a disaster, especially major airports. Airport personnel need to expect to be overwhelmed not only by the challenges presented by reduced airfield capabilities, but by having to provide care for survivors as they arrive, as well as for those present at the airport during the incident (food, shelter, medical care etc.)

**NEW MADRID SEISMIC ZONE
EARTHQUAKE
JOINT STATE OF MISSOURI & REGION
VII RESPONSE OPERATIONS PLAN**

Annex X, Execution Checklist

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

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1.0 Situation

This Situation Checklist is designed for senior leadership at Region VII to track the status of high-level actions associated with a catastrophic earthquake impacting the Missouri.

X = Action, C = Continuous, S = Situation Dependent

√	Action Items	Hours Post-Event					
		E	E+1	E+12	E+24	E+48	E+72
	Ensure that National Response Coordination Center (NRCC) is notified of the event and is receiving updates.	X	C	C	C	C	C
	Ensure that the Federal Emergency Management Agency (FEMA) Director is provided the Video Teleconference schedule and is invited to participate.			X	C	C	C
	Schedule regular briefings from the Response Division Director to review operational planning.			X	C	C	C
	Direct the execution of the Region IV New Madrid Seismic Zone (NMSZ) Operations Plan (OPLAN) if not done by subordinates.	S					
	Ensure contact with the Missouri State Emergency Management Agency (SEMA) Director.	X	C	C	C	C	C
	Attend VTCs and assign action items or issues to the appropriate Division or Office Directors for items not covered in existing OPLANs, and monitor status.	X	C	C	C	C	C
	Ensure that the Office of External Affairs is providing information to the media and scheduling briefings and press conferences.		X	C	C	C	C
	Contact the impacted states to discuss potential operations and support needed from the region.	X			X		
	Ensure any issues or questions raised by the FEMA Director are assigned for action and monitor status.	S	S	S	S	S	S
	Ensure the Recovery Division is developing a plan for long-term temporary housing, and monitor status.					X	C
	Direct the Response Division to provide regular updates and briefings in accordance with the NRCC Standard Operating Procedures (SOP) for use in press conferences and interviews.				X	C	C
	Monitor status of requests from governors for emergency or major disaster declarations.			X			

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Annex X – Execution Checklist

Joint Missouri & Region VII Response Operations Plan

√	Action Items	Hours Post-Event					
		E	E+1	E+12	E+24	E+48	E+72
	Identify and ensure communication of Initial Operating Facility (IOF)/Joint Field Office (JFO) status in each impacted state.				X	C	C
	Ensure activation letters are transmitted to FEMA Leadership, Emergency Support Functions (ESF), and other government agencies		X				
	Ensure Initial Regional Response Coordination Center (RRCC) Activation Briefing is completed.		X				
	Maintain situational awareness as incident escalates/de-escalates.	C	C	C	C	C	C
	Establish initial regional-level priorities and objectives. Review and revise as needed.			X	C	C	C
	Coordinate with the Office of Financial Management to ensure surge funds are allocated.						X
	Ensure the State Liaison Officer (SLO) has been identified and deployed, and that contact information has been shared with impacted state(s).		X				
	Ensure Incident Management Assistance Teams (IMAT) have been deployed, and that estimated arrival times/locations and contact information have been shared with impacted state(s).			X			
	Ensure Logistics Centers, Incident Support Bases (ISB), and Logistics Staging Areas (LSA) have been activated and sited, and that information has been shared with impacted state(s).			X			
	Ensure pre-scripted resources/commodities are activated and delivery sites are identified, and that information has been shared with impacted state(s).			X			
	Ensure that the Military Liaison Officer has verified the Base Support Installation (BSI) list for potential mobilization centers.			X			

2.0 Execution Checklist

The following Execution Checklist is designed for senior leadership within each ESF to track the status of high-level actions associated with a catastrophic earthquake impacting the State of Missouri.

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ESF-1 Transportation							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA	MoDOT	Alert all state transportation partners				
RRCC	FEMA	USDOT	Alert all federal transportation partners				
SEOC	MoDOT		Ensure Post Incident Bridge Inspection Team auto response (5.0+)				
SEOC	MoDOT	USDOT	Anticipate maximum damage to roads, bridges, rail, air port and waterways				
MoDOT EOC	MoDOT		Assess status and availability of MoDOT district offices and local staff				
SEOC	MoDOT	USDOT	Divert east bound ground traffic to north and south routes				
SEOC	MoDOT	FAA	Request temporary flight restrictions from FAA				
SEOC	MoDOT		Report to MoDOT Emergency Operation Center				
SEOC	SEMA	MoDOT	Report to State Emergency Operation Center				
SEOC	MoDOT	USDOT	Facilitate exchange of information between local, state and federal officials				
SEOC	MoDOT	MDNR	Begin clearing roadway of debris and coordinate with law enforcement to remove damaged or blocking vehicles				
SEOC	SEMA	MoDOT	Request mutual aid resources to support activities				
SEOC	SEMA	MoDOT	Submit pre-scripted EMAC requests for out-of-state resources				
SEOC	SEMA	MoDOT	Prepare ARF for federal resource requests				
RRCC	FEMA	USDOT	Mobilize other federal resources and push to staging areas				
SEOC	MoDOT		Ensure road, port, air, and rail facilities are assessed for damage				
SEOC	MoDOT	USDOT	Coordinate with Air Ops and Civil Air Patrol for aerial assessment of transportation damage				
SEOC	MoDOT	USDOT	Provide operational priorities to the field teams and coordinate between state and federal to identify staffing needs				
SEOC	MoDOT		Establish and implement rotation schedules for response teams				
SEOC	MoDOT	SEMA	Request support from partner agencies				
SEOC	MoDOT	SEMA	Coordinate with local emergency operation centers				
SEOC	MoDOT	SEMA	Ensure logistical needs are established for all operations, tasks and support				

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ESF-1 Transportation (continued)							
SEOC	MoDOT	USDOT	Coordinate the stabilization of transportation infrastructure and systems				
SEOC	MoDOT	USDOT	Prepare information for inclusion in the SitRep and the IAP				
SEOC	SEMA	MDEOC	Maintain effective interaction between the MoDOT-EOC and the SEOC				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MoDOT	SEMA	Continue to gather information and situational awareness for air, rail, road, waterway, and port				
SEOC	MoDOT	SEMA	Verify and analyze information received from the field				
SEOC	MoDOT	SEMA	Continue to prioritize priority routes and continue to deploy assets to priority areas				
SEOC	MoDOT	SEMA	Identify viability of existing priority routes and systems				
SEOC	MoDOT	SEMA	Identify temporary and alternative transportation solutions for impacted systems				
SEOC	MoDOT	SEMA	Coordinate activities with all affected response partners				
SEOC	MoDOT	SEMA	Arrange transportation support to allow emergency responders access into affected area				
SEOC	MoDOT	SEMA	Arrange for heavy equipment support to affected area				
SEOC	MoDOT	SEMA	Continue assessment of all transportation routes including bridges				
SEOC	MoDOT		Conduct rail line evaluation, inspection and outreach, including highway crossing safety				
SEOC	MoDOT	CAP/FAA	Continue to facilitate aerial damage assessments and delivery of life safety materials				
SEOC	MoDOT		Continue to facilitate repair and identification of alternate routes including debris clearance from critical routes				
SEOC	SEMA	MoDOT	Request inter-state and intra-state resources to meet priorities				
SEOC	USCG	MSHP/WPD	Establish priorities for closing /opening of port facilities and vessels				
SEOC	USCG	MSHP/WPD	Coordinate with Missouri State Highway Patrol, Water Patrol Division and the US Coast Guard for Port and waterway safety and evaluation				
SEOC	MSHP/WPD	MoDOT	Coordinate with waterway ferries for viability and transportation of resources, equipment and personnel				
SEOC	MoDOT	SEMA	Continue to address outstanding issues from prior periods				

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ESF-1 Transportation (continued)							
SEOC	MDNR	USACE	Coordinate with MoDOT for potential and actual damage to priority routes and transportation implications				
SEOC	MoDOT	USDOT	Initiate consideration and activation for regulatory waivers				
SEOC	MoDOT	SEMA	Develop objectives for the next operational period				
SEOC	MoDOT	SEMA	Develop reports (SitRep, IAP, etc.)				
SEOC	MoDOT	SEMA	Post reports to reporting system				
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA	MoDOT	Monitor the status of active mission assignments				
SEOC	MoDOT	SEMA	Determine the progress of transportation resources according to priorities, assess and implement sustainment resource needs for responders and equipment				
SEOC	MoDOT	SEMA	Evaluate the coordination of inter-state detour routing and public information for routing traffic around impacted areas				
SEOC	MoDOT		Validate preliminary information and continue to gather and analyze information for sustainment and recovery operations				
SEOC	MoDOT	SEMA	Provide mission support and request additional assets and emergency contracting for high priority issues				
SEOC	MoDOT	SEMA	Provide information for incident action planning, situation reporting, and senior leadership				
SEOC	MoDOT		Assess staffing and resource, needs and planning for rotating staff and equipment				
SEOC	SEMA	MDEOC	Maintain effective interaction between the MoDOT-EOC and the SEOC				
SEOC	MoDOT		Begin demobilization planning				

REDACTED

ESF-2 Communications							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local		Activate local EOC and Emergency Tactical Interoperable Communications Plan (TICP)				
LEOC	Local		Support local emergency responder communications				
LEOC	Local		Establish a central point of contact for radio communications with the SEOC, via the MSHP Regional Troop HQ on 155.370 Point-to-Point				
LEOC	Local		Assess damage to local emergency communications systems				
LEOC	Local		Disseminate damage assessment reports to SEOC				
LEOC	Local		Prepare list of critical resources needed to restore emergency communications				
LEOC	Local		Establish a Local Net Control Station transmit initial status reports from local governmental units to the Troop HQ via the Point to Point frequency (155.370)				
SEOC	MSHP		Establish the extent of damage to the radio and information systems located at MSHP Troop E, Poplar Bluff and MSHP Troop C, Weldon Spring				
SEOC	MSHP		Establish Radio net coordination with local jurisdictions				
SEOC	MSHP		Establish communications with SEOC				
SEOC	MSHP		Collect damage assessment reports from field MSHP Troopers/ local jurisdictions				
SEOC	MSHP		Forward damage assessment reports to the SEOC				
SEOC	SEMA		Establish communications between FEMA and the SEOC				
SEOC	SEMA		Obtain detailed information on power outage from ESF-12				
SEOC	SEMA		Staff the State Emergency Communications Center				
SEOC	SEMA		Dispatch the MCV				
SEOC	SEMA		Activate personnel necessary to meet communications needs				
SEOC	SEMA		Provide communication for response agencies				
SEOC	SEMA		Maintain records and report on the communications systems status to the SEOC				

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ESF-2 Communications (continued)							
SEOC	SEMA		Make necessary repairs to communications systems or switch to alternate systems				
SEOC	SEMA		Initiate requests for support				
SEOC	DFS		Coordinate communications with jurisdictions having only fire mutual aide systems access				
SEOC	DFS		Relay communications traffic to the SEOC				
SEOC	Amateur Radio		Activate resources, assess needs, and establish points-of-contact				
SEOC	Amateur Radio		Coordinate with the SEOC Communications				
RRCC	FEMA		Activate ESF-2 – The Regional Emergency Communications Coordinator (RECC) will coordinate additional requests for ESF 2 staff.				
RRCC	FEMA		Request activation of the FEMA National Radio System (FNARS) and/or the Shared Resources (SHARES) High Frequency Radio Program				
RRCC	NCC		Provide guidance for restoration of systems, manage federal frequency usage and develop a comprehensive frequency management plan				
RRCC	NCC		Coordinate with OCS to resolve frequency usage issues				
RRCC	GSA		Activate Regional Managers				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local EMA		Assess critical emergency communication systems				
LEOC	Local EMA		Stabilize or restore emergency communications				
LEOC	Local EMA		Provide situation updates and damage assessment data to SEOC				
LEOC	Local EMA		Assess the need for additional assets and request resources				
LEOC	Local EMA		Coordinate emergency communications operations with arriving responders				
SEOC	MSHP		Verify, analyze, and develop reports that provide a common operating picture				
SEOC	MSHP		Prioritize key locations and activities that need emergency communications operations				
SEOC	MSHP		Task MDPS regional and state assets to support operations				

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ESF-2 Communications (continued)							
SEOC	MSHP		Establish, stabilize or restore emergency communications				
SEOC	MSHP		Consolidate damage assessment reporting; provide regular briefings to senior officials				
SEOC	SEMA		Deploy mobile assets and amateur radio				
SEOC	SEMA		Prioritize restoration activities, relay information to SEOC				
SEOC	SEMA		Assess continued operations, project longer term resources needs				
SEOC	MDFS		Serve as liaison for communities limited to fire mutual aid for emergency communications				
SEOC	Amateur Radio		Deploy resources in conjunction with SEMA guidance				
SEOC	Amateur Radio		Initiate contact with impacted area				
RRCC	FEMA/NCC		Support tactical communications for federal response				
RRCC	FEMA/NCC		Ensure Essential Services Providers are accommodated in response needs				
RRCC	FEMA/NCC		Coordinate with private sectors				
RRCC	FEMA		Assess, reestablish nodes and prioritize response				
Phase 2c – Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MSHP		Monitor and assess the situation and support local jurisdictions in the stabilization and restoration of emergency communications				
SEOC	MSHP		Maintain RNCS, ensure coordinated communications				
SEOC	MSHP		Provide reports and information to senior leadership on restoration activities as well as ongoing damage assessment, as requested				
SEOC	SEMA		Coordinate ongoing Emergency Communications				
SEOC	SEMA		Coordinate with FEMA/ESF-2 on the restoration of services				
SEOC	SEMA		Ensure mobile assets are deployed and functioning for communications redundancy				
SEOC	SEMA		Coordinate continued amateur radio operations				
RRCC	FEMA/NCC		Verify, analyze, and develop reports that provide current operating picture for commercial and public safety communications networks				

REDACTED

ESF-2 Communications (continued)							
RRCC	FEMA/NCC		Develop a comprehensive understanding of critical infrastructure impacted by the incident				
RRCC	NCC		Identify actual and planned actions of commercial communications industry for recovery and reconstruction				
RRCC	FEMA/NCC		Continue to survey the status of the communications infrastructure				

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ESF-3 Public Works							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDNR	USACE	Assign priorities to critical infrastructure including drinking water, waste water, sanitation, and debris clearance				
SEOC	MDNR	USACE	Begin immediate clearance (not removal) of debris as encountered				
SEOC	MDNR	USACE	Establish comprehensive communication plan with responding organization				
SEOC	MDNR	USACE	Provide public section protective guidance with external affairs and safety information regarding the critical infrastructure				
SEOC	MDNR	USACE	Evaluate drinking water, waste water, and sanitation systems				
RRCC	USACE	MDNR	Assess dams and assist with debris removal, coordination and technical support				
SEOC	MDNR	USACE	Submit pre-scripted EMAC requests for out-of-state resources				
SEOC	MDNR	USACE	Prepare ARF for federal resource requests				
SEOC	MDNR	USACE	Provide operational priorities to the field teams and coordinate between state and federal to identify staffing needs				
SEOC	MDNR	USACE	Coordinate with local emergency operation centers				
SEOC	MDNR	USACE	Ensure logistical needs are established for all operations				
SEOC	MDNR	USACE	Respond to staging areas and begin addressing initial resource needs				
SEOC	MDNR	USACE	Maintain responsibility for the coordination of debris clearance, critical infrastructure, and systems				
SEOC	MDNR	USACE	Maintain effective interaction between the DNR, USACE, and the SEOC				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDNR	USACE	Analyze and verify information received from the field				
SEOC	MDNR	USACE	Establish staffing protocol for essential coverage				
SEOC	MDNR	USACE	Re-evaluate and monitor mission assignments and viability assessments				
SEOC	MDNR	USACE	Activate pre-existing contracts, private resources, and mutual aid agreements				

REDACTED

ESF-3 Public Works (continued)							
SEOC	MDNR	USACE	Coordinate, evaluate and identify viability of the restoration and re-establishment of drinking water, waste water and sanitation systems				
SEOC	MDNR	USACE	Identify temporary and alternative transportation solutions for impacted systems				
SEOC	MDNR	USACE	Update public action protective guidance with external affairs				
SEOC	MDNR	USACE	Reassess debris clearance assessment and begin removal operations, arrange support to allow additional and continued access into affected area for heavy equipment and support				
SEOC	MDNR	USACE	Monitor the evaluation of all drinking water, waste water and sanitation systems for current status				
SEOC	MDNR	USACE	Coordinate debris clearance from priority and critical transportation routes and be certain priorities are current and have not changed				
SEOC	MDNR	USACE	Request inter-state and intra-state resources to meet priorities				
SEOC	MDNR	USACE	Update and complete outstanding issues from prior periods				
SEOC	MDNR	USACE	Continue to coordinate and assess potential and actual damage				
SEOC	MDNR	USACE	Initiate consideration and activation for regulatory waivers				
SEOC	MDNR	USACE	Develop objectives for the next operational period				
SEOC	MDNR	USACE	Post reports to reporting system				
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA		Monitor the status of active mission assignments				
SEOC	MDNR	USACE	Determine infrastructure status and resource requirements according to priorities, assess and implement sustainment resource needs for responders and equipment				
RRCC	USACE	MDNR	Address commodities and emergency power needs for critical infrastructure				
RRCC	USACE	MDNR	Respond to Mission Assignments including infrastructure assessment and debris removal				
SEOC	MDNR	USACE	Begin assessment for removal/transportation and disposal process for cleared debris				
SEOC	MDNR	USACE	Create a permit and fee waiver process for burning and the reopening of closed landfills, etc.				

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ESF-3 Public Works (continued)							
SEOC	MDNR	USACE	Validate preliminary information and continue to gather and analyze information for sustainment and recovery operations				
SEOC	MDNR	USACE	Request additional assets and emergency contracting for high priority issues				
SEOC	MDNR	USACE	Evaluate staffing process and resource management planning				
SEOC	MDNR	USACE	Maintain effective interaction between the MoDOT-EOC and the SEOC				
SEOC	MDNR	USACE	Begin demobilization planning				

REDACTED

ESF-4 Firefighting							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA		Notify ESF-4 response partners				
RRCC	FEMA		Notify ESF-4 response partners				
SEOC	MDFS		Deploy an ESF-4 state liaison to the SEOC				
RRCC	USDA		Deploy a federal ESF-4 liaison to the SEOC				
SEOC	MDFS	MDNR	Implement an ESF-4 Information Collection Plan to gain situational awareness of fire and hazmat incidents in the affected area				
SEOC	MDFS	SEMA	Initiate the deployment of mutual aid resources				
SEOC	MDFS	SEMA	Process pre-scripted EMAC requests for firefighting resources				
SEOC	MDFS	SEMA	Prepare ARF for federal resource requests				
SEOC	MDFS	FEMA	Determine operational priorities and rules of engagement for fire				
SEOC	MDFS	MDNR	Determine resource requirements for fire and hazmat response				
SEOC	MDFS	FEMA	Request aerial assets to assess damages from fire incidents				
SEOC	MoDOT	FEMA	Coordinate ground and air routes for firefighting equipment into and out of the affected area				
SEOC	MDFS	FEMA	Deploy fire assets into forward staging, bases or into the incident area				
SEOC	MDFS	SEMA	Coordinate with ESF-7 for logistical needs				
LEOC	Local IC	MDFS	Establish and implement rotation schedules for response teams				
SEOC	MoDOT		Provide support for spill control on roadways (heavy equipment, dirt, sand, traffic barriers, etc)				
SEOC	MDFS	FEMA	Coordinate all firefighting response in the affected area (inter-state resources, intra-state resources, federal assets, etc.)				
SEOC	SEMA	MDHSS	Activate state radiological plans for any radiological release				
SEOC	MDFS	EPA	Coordinate with ESF-9 for hazmat support at rescue sites				
SEOC	MDFS	FEMA	Develop public information messages concerning fires, hazardous materials, plum data, etc. in coordination with ESF-15				
SEOC	MDFS	FEMA	Develop objectives for firefighting operations for the next operational period				

REDACTED

ESF-4 Firefighting (continued)							
SEOC	MDFS	SEMA	Develop incident documentation contents specific to ESF-4 (SitRep, IAP, etc.)				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
RRCC	EPA	FEMA	Identify critical water systems for firefighting and prioritize for restoration				
RRCC	USDA	FEMA	Obtain fire caches and support supplies from USFS				
SEOC	MDHSS	HHS	Maintain situational awareness of all health related complaints and perform epidemiological investigations to determine if they are caused by fire or hazmat				
SEOC	MDHSS	OSHA	Provide guidance on personal protective equipment				
SEOC	MDFS	FEMA	Assess damage to fire facilities in the area and provide assets to re-establish firefighting capabilities in the affected area				
SEOC	MDFS	FEMA	Develop and update public information regarding fires				
RRCC	NOAA	FEMA	Provide weather data to support response operations				
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDFS	FEMA	Monitor the status of active fire mission assignments				
SEOC	MDFS	FEMA	Determine the movement of fire assets according to priorities				
SEOC	MDFS	FEMA	Coordinate the release of fire assets				
SEOC	MDFS	FEMA	Provide information for incident action planning, situation reporting, and senior leadership				
SEOC	MDFS	FEMA	Begin demobilization planning				

REDACTED

ESF-5 Emergency Management							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local EMA		Activate local emergency operations plans				
LEOC	Local EMA		Activate local EOCs and support local emergency responders in the field				
LEOC	Local EMA		Act as the central point of contact for critical information				
LEOC	Local EMA		Disseminate critical information to SEOC				
LEOC	Local EMA		Prepare list of critical resources needed to stabilize the incident				
SEOC	SEMA		Verify the earthquake (> 6.5 activate the SEOC, < 6.5 monitor the situation and take appropriate actions)				
SEOC	SEMA		Initiate a Unified Command (UC), mobilize units in Regions BFIG, staff the Incident Command Post (ICP)				
SEOC	SEMA		Execute pre-scripted Executive Orders, Disaster Declaration Requests, ARFs and EMAC Requests				
SEOC	SEMA		Develop and Information Collection Plan (ICP) and serve as the collection point for incoming critical information				
SEOC	SEMA		Develop Incident Action Plan (IAP) with input from other ESF Coordinators				
SEOC	SEMA		Activate all state resources (listed in plans) as needed to save lives, protect property and stabilize the incident				
SEOC	SEMA		Establish communications with the FEMA RRCC and begin coordinated response efforts				
SEOC	SEMA		Coordinate the request for Temporary Flight Restrictions (TFR) from the FAA				
SEOC	SEMA		Coordinate with ESF-7 for provision of resources to support expedient operations				
SEOC	SEMA		Initiate contact with county-level emergency management to determine local government viability				
SEOC	SEMA		Evaluate and determine need to provide critical government services at the local jurisdictional level				
SEOC	SEMA		Coordinate the allocation of Incident Support Teams to support local jurisdictions				

REDACTED

ESF-5 Emergency Management (continued)							
SEOC	SEMA		Activate evacuation management team				
SEOC	SEMA		Determine if SACCs should be activated				
SACC	MDoC		Provide appropriate level of staffing for each SACC				
SEOC	MoDFS		Activate IMT				
SACC	MoDFS		Activate the Licensed Emergency and Disaster Registry (LEAD-R)				
SEOC	MoDPS		Activate the Director of Communications to serve as the liaison between the Governor's Office and SEMA				
RRCC	FEMA		Activate RRCC and establish contact with SEOC				
RRCC	FEMA		Activate support agencies				
RRCC	FEMA		Deploy Type II IMAT teams to Jefferson City				
RRCC	FEMA	NRCC	Request a Type I IMAT for the St. Louis area if damage indicates it is necessary				
RRCC	FEMA		Provide guidance and ensure controls are in place to protect responders and the public				
RRCC	FEMA		Provide situational awareness including modeling of current and forecasted impacts				
RRCC	FEMA		Ensure a common operating picture through information sharing and coordination with the SEOC				
RRCC	FEMA		Establish joint communication capability with federal, state, and local officials and be prepared to support joint state/federal representation				
RRCC	FEMA		Develop/implement joint public information plan with Missouri for timely and accurate information exchange				
RRCC	FEMA		Provide resources and equipment at critical facilities in accordance with state priorities				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local EMA		Furnish incident status reports to state officials				
LEOC	Local EMA		Maintain records of all emergency operations				
LEOC	Local EMA		Continue to provide situation updates and damage assessment data to SEOC				
LEOC	Local EMA		Assess the need for additional assets and request them from the SEOC				

REDACTED

ESF-5 Emergency Management (continued)							
LEOC	Local		Coordinate emergency operations with arriving responders				
SEOC	SEMA		Continue to gather essential elements of information				
SEOC	SEMA		Analyze and verify information and develop reports that provide current operating picture for the incident				
SEOC	SEMA		Provide situational awareness and deployment requirements for lifesaving response teams				
SEOC	SEMA		Develop joint IAP with input from ESF Coordinators and FEMA				
SEOC	SEMA		Coordinate location of JFO with FEMA				
SEOC	SEMA		Post reports to the designated reporting system				
SEOC	SEMA		Prioritize key locations/activities that need emergency management operations				
SEOC	SEMA		Continue to task regional and state assets to support operations in the affected area				
SEOC	SEMA		Establish/Develop maps, diagrams, charts, displays (situational awareness tools)				
RRCC	FEMA		Continue to support immediate lifesaving operations to include evacuations, search and rescue, mass care, medical assistance, and commodities				
RRCC	FEMA		Coordinate the provision of services, equipment, and supplies to support expedient operations				
RRCC	FEMA		Provide resources and equipment at critical facilities in accordance with state priorities				
RRCC	FEMA		Continue to work with local and state agencies to assess critical infrastructure and utilities, and maintain awareness of restoration				
RRCC	FEMA		Continue to provide guidance and ensure controls are in place to protect responders and the public				
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local		Continue to assess damage and report those damages up to the SEOC				
LEOC	Local		Continue to assess needs and make request to the SEOC				
SEOC	SEMA		Continue to monitor and assess the situation and support local responders to stabilize the incident				

REDACTED

ESF-5 Emergency Management (continued)							
SEOC	SEMA		Request FEMA to activate additional specialized resources				
SEOC	SEMA		Monitor the status of active mission assignments and move from rescue missions to recovery missions				
SEOC	SEMA		Continue to provide mission support				
SEOC	SEMA		Provide reports and information to senior leadership as requested				
RRCC	FEMA		Continue to provide resources in accordance with state priorities				
RRCC	FEMA		Continue to assess critical infrastructure and utilities and maintain awareness of restoration				
RRCC	FEMA		Monitor the status of active mission assignments and move from rescue missions to recovery missions				
RRCC	FEMA		Continue to provide mission support				
RRCC	FEMA		Provide reports and information to senior leadership as requested				

REDACTED

ESF-6 Mass Care							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
RRCC	FEMA		Activate all federal ESF-6 partners				
SEOC	SEMA		Activate all state ESF-6 partners				
SEOC	MODSS	SEMA	Determine anticipated affected population using GIS demographics modeling				
SEOC	MODSS		Determine mass-care requirements, initiate sheltering and feeding support for local jurisdictions accommodating evacuees				
SEOC	FEMA		Deploy the ESF-6 Planning Team to RRCC to determine needed level of support				
SEOC	MDSS		Establish regular contact with local jurisdictions, identify local mass-care coordinators				
SEOC	MDSS		Notify partner organizations				
SEOC	SEMA		Coordinate with ESF-15 for public information related to sheltering operations				
SEOC	MDSS	SEMA	Process pre-scripted EMAC requests for mass-care and sheltering				
SEOC	MDSS	SEMA	Prepare ARF for federal resource requests				
SEOC	MDSS	FEMA	Determine operational priorities				
SEOC	MDSS		Deploy a Bulk Distribution Lead to SEOC to work with appropriate NGO (TSA) and FBO				
SEOC	FEMA		Establish regular communication with state				
SEOC	ARC		Deploy staff to FEMA RRCC for support services				
SEOC	ARC		Utilize the National Shelter System to provide timely reports on shelter activations and level of mass-care operation				
RRCC	FEMA VAL		Coordinate integration of NGOs into response operations				
RRCC	NVOAD		Facilitate collaboration, communication, cooperation and coordination amongst NGO participants				
RRCC	FEMA		Deploy resources to coordinate logistical support of response operations/ bulk distribution				
RRCC	HSUS		Deploy National Disaster Animal Response Team				
RRCC	FEMA		Distribute assistance per request				

REDACTED

ESF-6 Mass Care (continued)							
SEOC	MDSS		Activate Show-Me Response, assist local jurisdictions with identifying vulnerable populations				
SEOC	MOHS		Activate call center to track pet shelter activation				
SEOC	MDSS		Make available interoperable communications in conjunction with ESF-2				
SEOC	MDSS	MCERT	Activated MCERT and deployed as needed				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDSS		Monitor mass-care operations, capacity, locations				
SEOC	MDSS		Facilitate the request for additional security assets, in conjunction with ESF-13				
SEOC	SEMA		Activate spontaneous volunteer reception				
SEOC	MODHSS		Provide medical support to mass-care operations in conjunction with public health				
SEOC	ARC/TSA		Support mass-care and sheltering within and outside the impacted area				
SEOC	MOHS		Deploy VMAT to needed locations				
SEOC	MDSS		Ensure continuous bulk distribution delivery				
SEOC	SEMA		Ensure procurement of needed supplies from all available sources				
SEOC	MDSS		Establish a state level Feeding Task Force to coordinate feeding operations and ensure the delivery of nutritional services to the sheltering population				
SEOC	MDSS		Develop long-term strategy for continuous feeding				
SEOC	MDSS		Engage USDA commodity foods program				
SEOC	DHSS		Provide support within the disaster-affected area				
RRCC	USACE		Inspect shelter locations, construct temporary shelters				
SEOC	ARC		Manage daily mass-care operations				
SEOC	MDSS	MSHP	Arrange for the appropriate security at bulk distribution locations				
RRCC	USDA		Provide technical expertise, nutritional assistance and medical care for sheltering pet populations				
RRCC	USDA		Locate and secure supplies of food to supplement those in disaster area				

REDACTED

ESF-6 Mass Care (continued)							
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDSS		Consolidate shelter operations for maximum sustainability				
SEOC	MDSS		Identify long term housing requirements and solutions				
SEOC	MDSS		Prioritize resource utilization for sustainable operations				
SEOC	ARC		Reassess shelter demand and capacity, work with local jurisdictions for routing evacuees out of state				

REDACTED

ESF-7 Logistics							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA		Alert all state ESF-7 partners				
RRCC	FEMA		Alert all federal ESF-7 partners				
LEOC	Local EMA		Deploy staff to Local Emergency Operations Centers (LEOC)				
LEOC	Local EMA		Activate available staff to assess conditions and identify resource needs				
LEOC	Local EMA		Establish communications with the SEOC by any means available				
LEOC	Local EMA		Provide resources and expertise to support disaster logistics and resource management operations				
SEOC	SEMA		Activate the State Area Coordination Centers (SACC)				
SEOC	SEMA		Activate and operate state Staging Areas				
SEOC	SEMA		Coordinate activation of Base Camps and PODs				
SEOC	SEMA		Notify business partners that the Business Emergency Operations Center (BEOC) will be activated				
SEOC	SEMA		Monitor situational reports, estimate resource needs, and supply all available resources based on priorities established				
SEOC	SEMA		Support and execute the Emergency Management Assistance Compact (EMAC)				
RRCC	FEMA LMD		Execute agency-wide logistics plans, policies, procedures, doctrines, standards, and governance				
RRCC	FEMA LMD		Provide FEMA Headquarters and RVII logistics with functional command, coordination, and oversight of all logistics activities				
RRCC	FEMA LMD		Coordinate the agency logistics response through the FEMA Headquarters Logistics Operations Center (LOC)				
RRCC	FEMA LMD		Provide agency wide logistics information management and communications capabilities				
RRCC	GSA		Locate, procure, and issue resources to support the federal emergency response or to promote public safety				
RRCC	GSA		Locate and coordinate use of available space for incident management activities				

REDACTED

ESF-7 Logistics (continued)							
RRCC	GSA		Coordinate and determine the availability and provision of consumable non-edible supplies stocked in DCs and customer supply centers when available				
RRCC	GSA		Procure required stocks from vendors or suppliers when GSA items are not available				
RRCC	GSA		Coordinate procurement of communications equipment and services in accordance with the OSTP National Plan for Telecommunications Support in Non-Wartime Emergencies				
RRCC	GSA		Provide support to the GSA Regional Administrator for all Resource Support activities				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local EMA	SEMA	Continue to assess resource needs, submit resource requests, and support receipt of assets for various life saving and life sustaining response operations				
LEOC	Local EMA	SEMA	Assist in resourcing health and medical and mass care needs within affected jurisdictions				
LEOC	Local EMA		Open and staff PODs and receive and distribute resources				
SEOC	SEMA	All State Departments	Coordinate allocation of resources with other state departments through the SEOC Logistics Section				
SEOC	SEMA		Support requests for federal assistance for disaster aid and submit ARFs				
SEOC	SEMA	All State Departments	Deploy personnel to establish the SACCs				
SEOC	SEMA		Execute contingency contracts				
SEOC	SEMA		Activate the BEOC				
SEOC	MOA		Support human resources, equipment, facilities, contracting expertise, and warehousing				
SEOC	All MO Departments		Provide resources and expertise as needed to support disaster logistics management and resource management operations				
RRCC	FEMA RVII		Provide material management including sourcing, ordering and replenishment, storage, and issuing of supplies and equipment				

REDACTED

ESF-7 Logistics (continued)							
RRCC	FEMA RVII		Provide transportation management including moving material from storage facilities and vendors to incident victims and supporting requests from other federal organizations				
RRCC	FEMA RVII		Provide facilities management for Base Camps, DCs, Distribution Centers, and NLSAs				
RRCC	FEMA RVII		Provide personal property management and policy and procedures guidance for maintaining accountability of material				
RRCC	FEMA RVII		Provide management of Electronic Data Interchange to provide end-to-end visibility of response resources				
RRCC	FEMA RVII		Provide coordination with internal and external customers and other supply chain partners in the federal and private sectors				
RRCC	FEMA RVII		Staff JFOs, FSAs, and ISBs, and coordinate the agency logistics response among field units				
RRCC	FEMA RVII		Provide regional funding and resource management				
RRCC	FEMA RVII		Provide accountability for FEMA property and equipment assigned to RVII				
RRCC	FEMA RVII		Execute Interagency Agreements (IAA) with OFAs and Non-Governmental Organizations (NGO) and procure support from local sources				
RRCC	FEMA Field Units		Execute Field Unit logistics plans, policies, and procedures				
RRCC	FEMA Field Units		Execute field logistics funding, budget, and resource management				
RRCC	FEMA Field Units		Execute IAAs and Memorandums of Understanding (MOU) with OFAs and NGOs at the field level				
RRCC	FEMA Field Units		Execute field logistics contracts with the private sector				
RRCC	FEMA Field Units		Coordinate agency logistics response at field units				
RRCC	FEMA Field Units		Coordinate field operations work with SEMA for terrain management, movement control, and security needs				

REDACTED

ESF-7 Logistics (continued)							
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local EMA		Provide local response personnel as capability allows				
LEOC	Local EMA		Manage response operations within the affected jurisdictions				
SEOC	SEMA		Activate and operate the SACCs in Areas C and E				
SEOC	SEMA		Identify new sources for resources and obtain resources as needed				
SEOC	SEMA		Manage logistics and resources in the impacted area within the State of Missouri				
SEOC	SEMA		Activate and operate staging areas, base camps, and PODs				
RRCC	USDOE		Coordinate with energy industries to assist in satisfying critical fuel, lubricant, and electrical power needs unable to be met by local, state, or federal resources or actions				
RRCC	DHS		Provide Contracting Officer's Technical Representatives from the RRCC, IMAT, or NRCC Logistics or Operations Section for all ESF-7-executed procurement contracts as appropriate				
RRCC	DHS		Provide an Accountable Property Officer to ensure compliance with property management regulation				
RRCC	USDOL		Provide technical personnel to assist in the identification and recruitment of individuals with specialized occupations needed to support response operations				
RRCC	USDOT		Provide information about the status of the transportation infrastructure				
RRCC	VA		Provide personnel knowledgeable in federal procurement and distribution operations				
RRCC	VA		Provide computer support operations				
RRCC	USOPM		Identify, locate, and, if necessary, recruit personnel needed to support incident operations after appropriate coordination with GSA				

REDACTED

ESF-8 Health and Medical							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA		Alert all state ESF-8 partners				
RRCC	FEMA		Alert all federal ESF-8 partners				
LEOC	LHA	LEMA	Deploy staff to the field and at LEOCs to survey public health and medical needs and report findings to the LEOC and to the SEOC				
LEOC	Local EMA		Activate staff to determine where medical Points of Distribution (PODs) will be located and communicate that information to the SEOC				
LEOC	LHA	LEMA	Coordinate patient care in affected areas and procurement of medical supplies with support from MDHSS				
LEOC	LHA	LEMA	Activate local SNS plans				
LEOC	Local Hospitals	LEMA	Determine the ability of the hospital to safely care for patients; coordinate with local health agency and/or MDHSS for evacuation assistance				
LEOC	Local Hospitals	LEMA	Provide care for an influx of disaster victims and report its status to the local health agency and/or MDHSS				
LEOC	Local EMS	LEMA	Respond to immediate medical needs of those injured in the earthquake and set up medical triage areas and casualty collection points				
DSR	MDHSS		Activate the Department Situation Room (DSR) and the Director of the Center for Emergency Response and Terrorism (CERT)				
SEOC	MDHSS		Activate ESF-8 auto-response plans to regions for which communication can not be established				
SEOC	MDHSS		Request National Disaster Medical System (NDMS) activation				
SEOC	MDHSS		Coordinate movement of MO 1-DMAT equipment and staff to the area				
SEOC	MDHSS		Request DMAT and DMORT assets				
SEOC	MDHSS	USDHHS	Request appropriate declarations, activations, and waivers				
SEOC	MDHSS		Develop status reports on casualties, building damage, state-wide bed poll, fatalities, and medical sheltering needs				
RRCC	USDHHS		Deploy a federal ESF-8 Liaison to the SEOC and the MDHSS DSR to coordinate federal support to the state				
SEOC	MDHSS		Determine placement of medical support trailers				

REDACTED

ESF-8 Health and Medical							
SEOC	MDHSS		Determine deployment plan for Mobile Medical Unit (MMU) and Modular Emergency Medical System				
SEOC	MDHSS		Determine appropriate placement of medical support trailers and a deployment plan for the Mobile Medical Unit (MMU) and Modular Emergency Medical System				
SEOC	MDHSS		Determine placement of Functional Needs Sheltering Caches from regional storage sites				
SEOC	MDHSS		Activate ambulance services that have Memorandums of Understanding in place with transportation companies to move patients to available facilities				
SEOC	MDHSS		Establish plan with the Missouri Hospital Association, Mid-America Regional Council (MARC), and St. Louis Area Regional Response System (STARRS) to open Alternate Care Sites				
SEOC	MDHSS	MDMH	Activate 'Show-Me Response' (ESAR-VHP)				
SEOC	MDHSS		Obtain Governor's executive orders recognizing out of state health care providers licenses, designating a central medical examiner, and approving altered standards of care				
SEOC	MDHSS	MDEA	Coordinate actions, in conjunction with the Missouri Funeral Director's and Embalmer's Association (MFDEA) and SEMA, to respond to mass fatality incidents or instances of mortuary support				
SEOC	MDHSS		Coordinate activation of Family Assistance Centers				
SEOC	MDHSS		Provide public information regarding where and how to access medical care				
SEOC	MDHSS		Prepare the request for the Federal Medical Station				
SEOC	MDHSS		Prepare the request for SNS assets and activate the Receipt, Staging, and Storage (RSS) Warehouse				
SEOC	MDHSS	MFDEA	Assess local mortuary capacity and capability in impacted zones and determine resource needs				
SEOC	MDHSS	MFDEA	Coordinate the activation and staging of the MFDEA-DRT and request the Region VII DMORT				
SEOC	MDHSS		Identify long-term care and other non-traditional facilities that might be suitable to house ill patients				
SEOC	MDHSS	MDMH	Provide surge capacity crisis counseling to include emergency workers				

REDACTED

ESF-8 Health and Medical							
SEOC	MDHSS		Plan to integrate volunteers from unaffected states and consider altered standards of care				
SEOC	MDHSS		Provide EMS branch chief to the SEOC				
SEOC	MDHSS		Provide Human Services Branch to the SEOC				
SEOC	MDHSS		Provide staffing for the evacuation management team				
SEOC	MDHSS		Activate inspection teams, as available, to support hospital inspections				
SEOC	MDMH		Determine need to evacuate mental health patients/consumers from state-run facilities				
SEOC	MHP	MONG	Provide security at triage and treatment sites				
RRCC	USDHHS		Activate the Federal ESF-8 Incident Response Coordination Team				
RRCC	USDHHS	VA/DOD	Consider and process requests for resources including requests for SNS assets, requests for activation of the National Disaster Medical System and other critical requests				
RRCC	DHS	USDOT	Identify and arrange for use of aircraft and other assets in providing urgent airlift and other transportation support				
RRCC	FEMA	GSA/ USDOJ/ USDA	Provide logistical support for deploying ESF-8 medical elements				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local EMA		In consultation with MDHSS, determine how to provide for the health and medical needs of the shelter populations within the impact zone				
LEOC	Local EMA		Open and staff PODs and receive and distribute resources to support health and medical operations.				
LEOC	Local EMS	LEMA	Establish designated medical treatment stations at temporary shelters within the impact zone				
LEOC	Local Social Services	LEMA	Support transport and treatment of patients and request resources through the LEOC and/or SEOC to sustain operations				
LEOC	Local MFDEA	LEMA	Assist with mass care and crisis counseling for victims and local responders				
SEOC	MDHSS		Coordinate mortuary services				
SEOC	MDHSS		Receive the SNS assets				

REDACTED

ESF-8 Health and Medical						
SEOC	MDHSS		Coordinate ambulances to transport patients from evacuate hospitals, skilled nursing facilities, or other triage points to the designated helispot for patient evacuation			
SEOC	MDHSS	MHA	Request support via EMAC and the National Ambulance Contract			
SEOC	MDHSS		Collaborate with the Missouri Hospital Association (MHA) to provide regional coordination of direct patient care including triage, decontamination, isolation, and documentation			
SEOC	MDHSS		Coordinate with U.S. Transportation Command (USTRANSCOM) to support NDMS activation and MEDVAC missions to move patients to designated Federal Coordinating Centers (FCC) for definitive care			
SEOC	MDHSS		Deploy the MEMS to or near the impacted area to be used by a damaged hospital or as a field aid station			
SEOC	MDHSS		Support temporary shelter and expedited evacuation of people with functional needs (disabilities)			
SEOC	MDHSS		Support people with chronic illnesses, via provision of maintenance medications and any necessary medical attention			
SEOC	MDHSS		Coordinate with local health departments and local mass care and sheltering coordinators to monitor all aspects of public health in shelters by conducting disease surveillance and implementing interventions necessary to ensure disease outbreak is prevented in shelters			
SEOC	MDHSS		Coordinate with local and federal partners to implement use of the Joint Patient Assessment and Tracking System (JPATS)			
SEOC	MDHSS	MFDEA	Coordinate and deliver risk communications and public health information through the MDHSS PIO/JIC and appropriate local public health agencies			
SEOC	MDMH	MDHSS	Develop and disseminate guidance to all responding personnel, including search and rescue and law enforcement personnel, instructing as to the handling, care, and reporting of dead bodies			
RRCC	USDHHS		Coordinate deployment of mental health workers to integrated shelters			
RRCC	DOD/GPMRC		Request personnel to address public health, medical, and veterinary medical needs			
RRCC	USDOJ		Notify the Office of the Assistant Secretary of Defense for Health and the Veterans Administration (VA) Emergency Management Strategic Health Care Group (EMSHG) to begin FCC bed availability reports			
RRCC	USDOL		Provide security for the SNS, secure movement of needed blood and blood product supply, and quarantine enforcement assistance			

REDACTED

ESF-8 Health and Medical (continued)							
RRCC	USDOS		Provide personnel and management support related to worker safety and health in field operations during ESF-8 deployments				
RRCC	USDOT		Act as the health and medical services information conduit to U.S. Embassies/Consulates				
RRCC	VA		Coordinate with the Federal Aviation Administration for air traffic control support for priority missions				
RRCC	VA		Coordinate with participating NDMS hospitals to provide incident-related medical care to authorized NDMS beneficiaries affected by a major disaster or emergency				
RRCC	USEPA		Furnish available VA hospital care and medical services to individuals responding to, involved in, or otherwise affected by a major disaster or emergency				
RRCC	USEPA		Provide technical assistance and environmental information for assessment of the public health/medical aspects of situations involving hazardous materials, including technical and policy assistance in matters involving water and wastewater systems, for critical health care facilities				
RRCC	USEPA		Assist in identifying alternate water supplies and wastewater collection and treatment for critical health care facilities				
RRCC	USEPA		Provide environmental technical assistance (e.g., air monitoring) and information in the event temporary interment is necessary and/or human remains are contaminated				
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDHSS		Work with appropriate state and local agencies to prevent secondary transmission of communicable diseases through patient isolation and quarantine and enhanced surveillance				
SEOC	MDHSS	MDNR/MDA	Coordinate environmental and sanitation health issues with the Missouri Department of Natural Resources (MDNR) and Missouri Department of Agriculture (MDA)				
SEOC	MDHSS	MHA	Gather information on the hospitals and nursing homes within the affected area through local health districts and through a partnership with the Missouri Hospital Association				

REDACTED

ESF-8 Health and Medical						
SEOC	MDHSS		Prepare a daily situational briefing to be given to the department leadership			
SEOC	MDHSS		Determine if additional deployable field hospitals are needed			
SEOC	MDHSS	MFDEA	Assist in managing mass fatalities in coordination with the local coroner (or central coroner if activated) and the MFDEA			
SEOC	MDHSS		Request deployment of one or more DMORT teams and the Disaster Portable Morgue Unit Team (DPMU)			
SEOC	MDHSS		Implement measures to assure food safety			
SEOC	MDHSS		Working with local public water providers, county environmental health departments, and public works departments, confirm the availability of potable water supplies to the general public as well as the healthcare infrastructure			
SEOC	MDHSS		Provide enhanced water well testing for homes on private and community wells			
SEOC	MDHSS		Work with local public health authorities to re-establish public health services			
SEOC	MDMH		Work with contracted mental health agencies to ensure that patients who require treatment in licensed facilities are moved			
SEOC	MDMH		Provide access to needed methadone medications to patients currently under treatment who may have to be moved to other treatment programs			
SEOC	MDMH		Develop a request for the FEMA Crisis Counseling Program			
SEOC	MDMH		Provide a 24/7 mental health hotline numbers for the disaster			
SEOC	MDMH		Work with ESF 6 to coordinate requested mental health and substance abuse services at shelters			
SEOC	MDSS		Coordinate reunion of separated families, assist with mass care facilities, and provide essential services to displaced persons			
RRCC	USDHHS		Monitor blood and blood product shortages and liaison with the AABB Interorganizational Task Force on Domestic Disasters and Acts of Terrorism (i.e., AABB TF)			
Field	USDHHS	DOD	Deploy the Public Health Service Commissioned Corps to assist with a variety of public health needs			
Field	USDHHS	DOD	Deploy Federal Medical Stations (FMS) to treat non-acute medical, mental health, and other health-related needs that cannot be accommodated or provided for in a general shelter			

REDACTED

ESF-8 Health and Medical							
RRCC	DOD		Coordinate patient reception, tracking, and management to nearby NDMS hospitals, VA hospitals, and DOD military treatment facilities that are available and can provide appropriate care				
RRCC	DOD		Provide available DOD medical supplies for distribution to mass care centers and medical care locations being operated for incident victims with reimbursement to DOD				
Field	USDOJ	FBI	Assist in victim identification and provide state or local officials with legal advice concerning identification of the dead				
Field	USDOJ		Establish an adult missing persons call center and assists in the disposition of cases				
Field	ARC		Provide available personnel to assist in temporary infirmaries, immunization clinics, morgues, hospitals, and nursing homes				
Field	ARC		Acquaint families with available health resources and services, and make appropriate referrals				
Field	ARC		Support reunification efforts through “Safe and Well” website and in coordination with government entities				

REDACTED

ESF-9 Search and Rescue							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA		Alert all state ESF-9 partners				
RRCC	FEMA		Alert all federal ESF-9 partners				
SEOC	MDFS		Activate and coordinate Missouri Fire Mutual Aid System				
SEOC	MDFS	SEMA	Support S&R teams with a State Liaison at SEOC				
RRCC	FEMA		Deploy an ESF-9 Liaison to Missouri SEOC				
SEOC	MDFS	FEMA	Implement the ESF-9 Information Collection Plan (ICP)				
SEOC	MDFS	FEMA	Conduct joint assessments to determine priorities based on current capabilities				
SEOC	MDFS	FEMA	Mobilize Missouri Task Force 1 (MO-TF1)				
SEOC	MDFS	FEMA	Request activation of FEMA US&R assets to support Missouri				
RRCC	FEMA	DOD	Request Ft. Leonardwood be activated as Incident Support Base for FEMA US&R				
RRCC	FEMA		Establish IST with US&R Teams				
RRCC	FEMA		Mobilize Nebraska Task Force 1 (NE-TF1)				
LEOC	Local	MDSF	Request mutual aid resources to support S&R activities				
SEOC	SEMA	MDFS	Submit pre-scripted EMAC requests for out-of-state resources				
SEOC	SEMA	MDFS	Prepare ARF for federal resource requests				
RRCC	FEMA		Mobilize other federal US&R resources and push to staging areas				
RRCC	FEMA	HHS	Ensure medical assets are being pushed to staging to arrive in conjunction with S&R teams				
SEOC	SEMA	FEMA	Activate GIS mapping personnel				
SEOC	MDFS	SEMA	Coordinate with local emergency operations centers on deployment of S&R team assets				
SEOC	MDFS	SEMA	Provide operational priorities to field teams				
LEOC	Local	MDFS	Establish and implement rotation schedules for response teams				
SEOC	MDFS	FEMA	Coordinate with Air Ops and ESF-1 for transportation for rescue movement requesting priority for life-saving mission				

REDACTED

ESF-9 Search and Rescue (continued)							
SEOC	SEMA	MDFS	Activate Civil Air Patrol for aerial/ground search operations				
SEOC	MDFS	SEMA	Coordinate and integrate CAP into aerial and ground search operations.				
SEOC	MDFS	SEMA	Verify the deployment of casualty collection points and fatality collection points				
SEOC	MDHSS	MDFS	Disseminate the state procedures for handling the deceased once located by S&R teams				
SEOC	MDFS	FEMA	Request support from partner agencies (engineering technical assistance, heavy equipment, supplies, security, etc.)				
SEOC	SEMA	MDFS	Ensure logistical needs are established for S&R operations and support				
SEOC	MDFS	FEMA	Gather search data from field teams				
SEOC	MDFS	FEMA	Prepare information for inclusion in the SitRep and IAP				
SEOC	MDFS	FEMA	Determine operational priorities and rules of engagement for S&R response (i.e. National Grid)				
SEOC	MDFS	FEMA	Determine resource requirements for S&R response				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDFS	SEMA	Verify and analyze information received				
SEOC	MDFS	SEMA	Prioritize S&R missions and continue to deploy S&R assets				
SEOC	MDFS	FEMA	Provide operational areas for federal S&R missions				
RRCC	FEMA		Coordinate with ESF-7 and IST to establish and support US&R base camps				
RRCC	FEMA		Execute the Federal Search and Rescue Response System				
RRCC	FEMA		Activate support agencies				
RRCC	FEMA	RRCC	Request deployment of additional federal S&R assets				
SEOC	MDFS	FEMA	Provide situational awareness to field teams				
SEOC	MDFS	SEMA	Request inter-state and intra-state resources to meet priorities				
SEOC	MDFS	SEMA	Develop objectives for next operational period				
SEOC	MDFS	SEMA	Develop reports (SitRep, IAP, etc.)				
SEOC	DOS	FEMA	Employ international S&R assets to assist with US&R operations				

REDACTED

ESF-9 Search and Rescue (continued)							
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDFS	FEMA	Monitor status of active S&R mission assignments				
SEOC	MDFS	FEMA	Determine movement of S&R resources according to priorities				
SEOC	MDFS	FEMA	Coordinate release of S&R assets from one area to another according to priorities				
SEOC	MDFS	FEMA	Validate preliminary information and continue to gather and analyze information				
SEOC	MDFS	FEMA	Continue to provide mission support and request S&R assets				
SEOC	MDFS	FEMA	Provide information for incident action planning, situation reporting, and senior leadership				
SEOC	MDFS	FEMA	Begin demobilization planning				

REDACTED

ESF-10 Hazardous Material Response							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA	MDNR/MDFS	Notify ESF-10 state response partners				
RRCC	FEMA	USEPA	Notify ESF-10 federal response partners				
SEOC	MDNR	MDFS	Deploy an ESF-10 state liaison to the SEOC				
RRCC	EPA		Deploy an ESF-10 liaison to the SEOC				
SEOC	MDNR	FEMA	Implement an ESF-10 Information Collection Plan to gain situational awareness of hazmat incidents in the affected area				
SEOC	MDNR	MDFS	Deploy MDNR Environmental Emergency Response Unit State On-Scene Operations Coordinator (EER SOSOC) to the affected areas to assess the hazmat situation				
SEOC	MDNR	SEMA	Initiate the deployment of mutual aid resources				
SEOC	MDNR	SEMA	Process pre-scripted EMAC requests for hazmat resources				
SEOC	MDNR	SEMA	Prepare ARF for federal resource requests				
SEOC	MDNR	FEMA	Determine operational priorities and rules of engagement for hazmat				
SEOC	MDNR	FEMA	Determine resource requirements for hazmat response				
SEOC	MDNR	FEMA	Deploy hazmat response assets into forward staging, bases or into the incident area				
SEOC	MDNR	SEMA	Coordinate with ESF-7 for logistical needs				
EOC	Local	MDFS	Establish and implement rotation schedules for response teams				
SEOC	MoDOT		Provide support for spill control on roadways				
SEOC	MDNR	FEMA	Deploy resources to assess and initiate removal of debris from sites with potentially hazardous materials				
SEOC	MDNR	FEMA	Coordinate all hazardous materials response in the affected area				
RRCC	EPA	SEMA	Deploy DOE assets for detecting, monitoring, and responding to accidents involving radioactive materials				
SEOC	SEMA	MDHSS	Activate state radiological plans for any radiological release				
SEOC	MDNR	EPA	Coordinate with ESF-9 for hazmat support at rescue sites				
SEOC	MDNR	EPA	Provide technical assistance for hazmat response operations				

REDACTED

ESF-10 Hazardous Material Response (continued)							
SEOC	MDNR	FEMA	Develop public information messages concerning fires, hazardous materials, plum data, etc.				
SEOC	MDNR	FEMA	Develop objectives for hazmat response operations for the next operational period				
SEOC	MDNR	SEMA	Develop incident documentation contents specific to ESF-10				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDNR		Liaise with representatives from hazardous materials industries in the affected area				
SEOC	MDNR	USCG	Coordinate with federal partners for the deployment of the USCG Pacific Coast Strike Force				
RRCC	EPA	FEMA	Deploy and manage the EPA response teams for hazardous materials incidents				
RRCC	HHS	FEMA	Deploy CDC Agency for Toxic Substance and Disease Registry emergency response teams				
RRCC	USEPA	FEMA	Provide technical expertise and direct efforts for hazmat and oil spills				
SEOC	MDHSS	HHS	Maintain situational awareness of all health related complaints and perform epidemiological investigations to determine if they are caused by hazmat				
SEOC	MDHSS	OSHA	Provide guidance on personal protective equipment				
SEOC	MoDOT	USDOT	Issues special permits for the movement of hazmat, hazardous waste, and hazardous debris				
SEOC	MDFS	FEMA	Assess damage to fire facilities in the area and provide assets to re-establish hazmat capabilities in the affected area				
SEOC	MDNR	FEMA	Develop and update public information regarding hazmat spills				
RRCC	NOAA	FEMA	Provide weather data to support response operations				

REDACTED

ESF-10 Hazardous Material Response (continued)							
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDNR	FEMA	Monitor the status of active hazmat mission assignments				
SEOC	MDFS/MDNR	FEMA	Determine the movement of hazmat assets according to priorities				
SEOC	MDFS/MDNR	FEMA	Coordinate the release of hazmat assets				
SEOC	MDFS/MDNR	FEMA	Provide information for incident action planning, situation reporting, and senior leadership				
SEOC	MDFS/MDNR	FEMA	Begin demobilization planning				
SEOC	MDNR	EPA	Transition from hazmat response to long-term environmental recovery				

REDACTED

ESF-11 Agriculture							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA		Notify state ESF-11 response partners				
RRCC	FEMA		Notify federal ESF-11 response partners				
SEOC	MDA		Provide an ESF-11 representative to the SEOC				
RRCC	USDA		Provide an ESF-11 representative to the RRCC				
RRCC	USDA		Contact the Regional Emergency Program Manager and National Coordinator				
RRCC	MDA	USDA	Establish the ESF-11 Information Collection Plan to gain situational awareness and determine priority operations based on capabilities				
SEOC	USDA		Begin pre-deployment of resources to forward staging in anticipation of ground transportation availability				
RRCC	MDA	USDA	Coordinate NGO and Welfare Organization animal rescue/animal health resources as they arrive in state or as they offer assistance				
SEOC	USDA		Request the deployment of APHIS resources				
RRCC	MDA	USDA	Coordinate with MDC on wildlife issues in the affected area				
RRCC	MDA	USDA	Develop public information in coordination with ESF-15 to address safety and public health concerns caused by animals				
RRCC	MDA	USDA	Request inter-state, intra-state and federal assistance				
RRCC	MDA	USDA	Determine priorities and set objectives for agricultural response in the next operational period				
RRCC	MDA	USDA	Provide assistance to address the issues of wild animals and domestic animals that are roaming populated areas and causing safety issues or public health concerns				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDA		Activate and deploy Large Animal Rescue Team resources and State Veterinary Corps resources				
RRCC	USDA		Activate and deploy the NVRT and the OIG response team				

REDACTED

ESF-11 Agriculture (continued)							
RRCC	DoD	USDA	Activate the Senior Army Veterinary Corps Officers and Defense Veterinary Support Officers				
RRCC	HHS	USDA	Activate and deploy the US Public Health Service Commissioned Corps veterinary teams and epidemiologists				
SEOC	MDA	USDA	Coordinate with MDNR for technical assistance for the selection of animal burial sites				
RRCC	HHS	USDA	Coordinate with ESF-8 for food inspection, vector control and other public health issues				
SEOC	MDA	USDA	Assess whether meat, poultry, and egg product processors, distributors, and importers in the affected area are able to provide safe and secure food				
RRCC	USDA	MDNR	Properly dispose of contaminated food products in order to protect public health and the environment				
SEOC	MDA	USDA	Coordinate with ESF-1 for ground transportation issues and animal transport issues				
SEOC	MDA	USDA	Coordinate with ESF-7 regarding storage sites and staging areas for animal food and medical supplies				
SEOC	MDA	USDA	Work with GIS to develop maps and other resources for ground responders				
SEOC	MDA	USDA	Fill requests for equipment, personnel, and supplies essential for emergency response				
SEOC	MDA	USDA	Coordinate donations of animal food and supplies with the State Donation Coordinator				
SEOC	MDA	USDA	Provide assistance to small animal breeders, zoos and exhibits, and research facilities that house animals				
SEOC	MDA	USDA	Coordinate relief efforts from state and national organizations that assist veterinarians				
SEOC	MDA	USDA	Coordinate animal related disaster assistance and assist with identification and housing and other related services for animals				
SEOC	MDA	USDA	Provide surge capability for laboratory and diagnostic support				
SEOC	MDA	USDA	Direct movement of veterinary personnel working in the affected area				

REDACTED

ESF-11 Agriculture (continued)							
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDA	USDA	Prioritize animal response capabilities				
RRCC	USDA		Communicate with the State Emergency Board				
SEOC	MDA	MDNR	Form carcass disposal teams and begin the process of animal carcass disposal				
SEOC	MDA	MDNR	Record the location of carcass disposal sites and file with the proper authorities				
SEOC	MDA	USDA	Review euthanasia processes and issue procedures to field teams				
SEOC	MDA	USDA	Augment services to provide animal rescue, animal evacuation, humane euthanasia				
SEOC	MDA	USDA	Provide animal food and water to the affected area				
SEOC	MDA	USDA	Provide a reasonable level of assistance and care for livestock				
SEOC	MDA	USDA	Coordinate the assignment of relief personnel and the distribution of supplies from supply areas or staging				
SEOC	MDA	USDA	Assist support agencies with the long-term maintenance, placement or disposition of animals which cannot be returned to their normal habitat or which have been separated from owners				

REDACTED

ESF-12 Energy							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA	MoDOT	Alert and activate all state partners				
RRCC	FEMA	USDOT	Alert and activate all federal partners				
SEOC	MDNR		Activate MDNR-Energy Resource Center and the State of Missouri Energy Assurance Plan				
RRCC	USDOE		Activate the DOE-Energy Response Center supporting field efforts & situational awareness				
SEOC	PSC		Begin an immediate response and assessment through the PSC				
SEOC	MDNR/PSC		Collaborate with private, cooperative and municipal energy resource owners and energy partners				
SEOC	MDNR/PSC		Coordinate with public and private partners				
SEOC	MDNR/PSC	USDOE	Relay vital information to external affairs for public awareness and safety of the specific limitations and requirements				
SEOC	MDNR/PSC	USDOE	Integrate public, private sector entities into the planning and decision making process				
SEOC	MDNR/PSC	USDOE	Assess energy impacts, extent of damage and duration of energy shortfalls, evaluation of petroleum, natural gas, anhydrous product line breakage				
SEOC	MDNR/PSC	USDOE	Identify down electrical transmission and distribution lines				
SEOC	MDNR/PSC		Evaluate physical damage to substations and other related critical infrastructure				
SEOC	USDOE	MDNR/PSC	Determine the extent of damage to infrastructure and the impact of the damage on the regional and national energy systems				
SEOC	MDNR/PSC	USDOE	Identify requirements and resources required to repair the system				
SEOC	USDOE	MDNR/PSC	Facilitate restoration through federal and regional legal authorities and waivers				
SEOC	USDOE	MDNR/PSC	Establish power restriction priorities				
SEOC	USDOE	MDNR/PSC	Report to the RRCC, identify staffing needs and activate response center				
SEOC	USDOE	MDNR/PSC	Provide subject matter experts to assist with restoration efforts				
SEOC	MDNR/PSC		Request mutual aid resources to support activities				

REDACTED

ESF-12 Energy (continued)							
SEOC	MDNR/PSC		Submit pre-scripted EMAC requests for out-of-state resources				
SEOC	MDNR/PSC		Prepare ARF for federal resource requests				
SEOC	MDNR/PSC	USDOE	Establish a coordinated reporting cycle				
SEOC	MDNR/PSC	USDOE	Establish prioritization of power to critical infrastructure				
SEOC	MDNR/PSC	USDOE	Coordinate with Air Ops and Civil Air Patrol for aerial assessment of energy facility damage				
SEOC	MDNR/PSC	USDOE	Provide operational priorities to the field teams and coordinate between state and federal entities to identify staffing needs for the activated response centers				
SEOC	MDNR/PSC	USDOE	Assess the need and locate fuel and energy resources and coordinate with SEMA and MONG, coordinate/establish delivery routes and methods				
SEOC	MDNR/PSC	USDOE	Coordinate with local emergency operation centers				
SEOC	MDNR/PSC	USDOE	Ensure logistical needs are established for all operations, tasks and support				
SEOC	MDNR/PSC	USDOE	Maintain effective interaction between the MDNR-Energy Center and the SEOC				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	USDOE	MDNR/PSC	Staff the RRCC, JFOs, AFO and MACC as identified, needed and required				
SEOC	MDNR/PSC	USDOE	Verify and analyze information received from the field, report on status of outages and estimated restoration time frame				
SEOC	MDNR/PSC		Assess the time frame to re-establish/establish generation and transmission plants (6) that supply 41 Co-Ops				
SEOC	MDNR/PSC	USDOE	Receive outage reports from field teams, state and industry points of contact on a daily basis				
SEOC	MDNR/PSC		Facilitate energy resolutions to energy issues at activated response centers				
SEOC	MDNR/PSC	USDOE	Report outages and restoration timelines to SEOC and other energy partners				
SEOC	MDNR/PSC	USDOE	Re-assess prioritization of power to critical infrastructure				
SEOC	USDOE	MDNR/PSC	Assist with due diligence, processing regulatory waiver requests and invoking power authorities				

REDACTED

ESF-12 Energy (continued)							
SEOC	MDNR/PSC	USDOE	Request inter-state and intra-state resources to meet priorities				
SEOC	MDNR/PSC	USDOE	Develop objectives for the next operational period				
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MDNR/PSC	USDOE	Monitor the status of active mission assignments and EMAC requests, assess the need for new or additional assignments and requests				
SEOC	MDNR/PSC	USDOE	Determine and report the progress of priority requests, validate preliminary information and continue to gather and analyze information for sustainment and recovery operations to facilitate energy issues ensuring the restoration of critical infrastructure				
SEOC	MDNR/PSC	USDOE	Assess and implement sustainment resource needs for responders, equipment, and missions				
	USDOE	MDNR/PSC	Establish a permit and fee waiver process				
SEOC	USDOE	MDNR/PSC	Review and evaluate the permit and fee waiver process				
SEOC	MDNR/PSC	USDOE	Share and collaborate with all private, cooperative, municipalities and major companies involved in the partnership				
SEOC	MDNR/PSC	USDOE	Continue to provide mission support and request additional assets and emergency contracting for high priority issues				
SEOC	MDNR/PSC	USDOE	Evaluate and establish staffing and resource planning for rotating staff and a sustained response				

REDACTED

ESF-13 Law Enforcement							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local LE		Begin the mission of protecting lives, restoring order, providing emergency services, protecting property and securing the affected jurisdiction				
LEOC	Local LE		Activate local emergency operations plans				
LEOC	Local LE		Activate local public safety personnel and establish the Incident Command System				
LEOC	Local LE		Contact the SEOC and the MSHP				
LEOC	Local LE		Assess damage to public safety assets and disseminate critical information to SEOC				
LEOC	Local LE		Prepare list of critical law enforcement resources needed to stabilize and terminate the emergency				
LEOC	Local LE		Provide security input into an Incident Action Plan (IAP) and disseminate the plan, and roles and responsibilities to public safety agencies				
SEOC	MSHP		Mobilize units in Regions B, F, I, G, and provide staff for the Incident Command Post (ICP)				
SEOC	MSHP		Activate all required state ESF-13 personnel				
SEOC	MSHP		Establish contact with law enforcement agencies in impacted areas				
SEOC	MSHP		Assist local law enforcement with maintaining law and order				
SEOC	MSHP		Provide traffic and crowd control in coordination with Evacuation and Mass Care				
SEOC	MSHP		Provide security and traffic control at the SEOC				
SEOC	MSHP		Provide security at critical facilities and around key resources				
RRCC	FEMA		Activate support agencies				
RRCC	FEMA		Ensure a common law enforcement operating picture by coordination with the MSHP at the SEOC				
RRCC	FEMA		Coordinate with ESF-2 to create a sustainable joint law enforcement communication capability with federal/state/local officials and be prepared to support joint state/federal representation				
RRCC	FEMA		Provide resources and equipment at critical facilities in accordance with state priorities				

REDACTED

ESF-13 Law Enforcement (continued)							
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local LE		Continue to protect the citizens of each local jurisdiction				
LEOC	Local LE		Continue to support evacuation and sheltering procedures in coordination with ESF-6				
LEOC	Local LE		Continue to protect government facilities, government assets, and key infrastructure				
LEOC	Local LE		Continue to provide security at hospitals and other key non-government facilities				
LEOC	Local LE		Assist in securing local jails and facilities that hold large quantities of firearms				
LEOC	Local LE		Furnish incident status reports to state officials				
LEOC	Local LE		Maintain records of all emergency operations				
LEOC	Local LE		Continue to provide situation updates to SEOC				
LEOC	Local LE		Assess the need for additional assets and request them from the SEOC				
LEOC	Local LE		Coordinate emergency operations with arriving responders				
SEOC	MSHP		Verify, analyze, and develop reports that provide current operating picture for the incident				
SEOC	MSHP		Provide situational awareness and deployment requirements responding officers				
SEOC	MSHP		Assist with the development of the joint IAP				
SEOC	MSHP		Respond to local requests for assistance				
SEOC	MSHP		Assist other emergency services as directed by SEOC				
SEOC	MSHP		Patrol evacuated areas				
SEOC	MSHP		Conduct/support warning operations				
SEOC	MSHP		Assist with damage assessment to identify damaged areas, and analyze law enforcement requirements				
SEOC	MSHP		Provide security for reception center, lodging and feeding facilities, emergency shelters, and points of distribution (POD)				
RRCC	FEMA		With the SEOC and local Incident Commander, conduct immediate lifesaving operations to include assisting with evacuations and search and rescue operations				

REDACTED

ESF-13 Law Enforcement (continued)							
RRCC	FEMA		Coordinate the provision of services, equipment, and supplies to support expedient operations				
RRCC	FEMA		Continue to provide resources and equipment at critical facilities in accordance with state priorities				
RRCC	FEMA		Continue to work with local and state agencies to assess law enforcement capabilities, needs of jails and prisons, protection and safety of citizens, protection of key infrastructure, utilities and government facilities and control armories and firearms facilities				
RRCC	FEMA		Continue to provide guidance and ensure controls are in place to protect responders and the public				
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
LEOC	Local LE		Continue to assess needs and make request to the SEOC				
LEOC	Local LE		Continue to provide law enforcement and public safety				
LEOC	Local LE		Continue to secure the affected areas of local jurisdiction and maintain order				
LEOC	Local LE		Assist in the effective evacuation and sheltering of local citizens				
SEOC	MSHP		Monitor and assess the situation and support local responders to stabilize the incident				
SEOC	MSHP	FEMA	Provide mission support as requested				
SEOC	MSHP		Protect citizens and property				
SEOC	MSHP		Provide reports and information to senior leadership				
SEOC	MSHP		Release mutual aid and private resources when possible				
SEOC	MSHP		Support other services, especially in the areas of damage assessment, search and rescue				
SEOC	MSHP		Provide information for news releases				
RRCC	FEMA		Provide guidance and ensure controls are in place to protect responders and the public				
RRCC	FEMA		Continue to assess critical public safety assets, and maintain awareness of restoration				
RRCC	FEMA		Continue to monitor and assess the situation and support local responders to stabilize and recover from the incident				

ESF-13 Law Enforcement (continued)							
RRCC	FEMA		Provide reports and information to senior leadership				

REDACTED

ESF-14 Long Term Care							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA		Collect and conduct initial damage assessments and impact analysis				
SEOC	SEMA		Organize an ESF-14 task force and develop a framework to incorporate recovery				
SEOC	SEMA		Appoint a recovery point of contact to represent state				
RRCC	FEMA		Deploy branch director to JFO				
RRCC	FEMA		Establish initial coordination structure FCO/SCO/ State				
RRCC	FEMA		Coordinate with state ESF-14 Point of Contact				
RRCC	FEMA		Draft process for collection of damage and impact assessments				
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA		Assist with needs assessments, identify areas where there are unmet needs				
SEOC	SEMA		Identify level of state resources available for assistance				
SEOC	SEMA		Engage state agencies in recovery activities				
SEOC	SEMA		Coordinate with SBA, Missouri Public, Private Partnership				
SEOC	SEMA		Engage Nongovernmental Organizations and Community-Based Organizations				
RRCC	FEMA		Evaluate data, conduct Preliminary Assessments				
RRCC	FEMA		Prepare recommendations for leadership				
RRCC	FEMA		Obtain concurrence on strategic recommendations (FCO and State)				
RRCC	FEMA		Facilitate interagency coordination				

REDACTED

ESF-14 Long Term Care (continued)							
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA		Coordinate ESF-14 activities with local jurisdictions				
SEOC	SEMA		Reassess needs and gaps				
SEOC	SEMA		Implement state recovery framework				
SEOC	SEMA		Provide LTCR perspective to response decision making at the state level				
SEOC	SEMA		Coordinate communities requesting LTCR assistance				
RRCC	FEMA		Deploy LTCR staff to field				
RRCC	FEMA		Ensure collaborative interagency coordination, engage LTCR stakeholders				
RRCC	FEMA		Identify community level needs and available federal resources				

REDACTED

ESF-15 Public Affairs							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	DPS/SEMA		Activate Emergency Alert System (EAS)				
SEOC	DPS/SEMA	FEMA	Alert all state external affairs partners				
RRCC	FEMA		Alert all federal external affairs partners and Region VII External Affairs Officers				
SEOC	DPS/SEMA		Deploy Communication Directors/PIOs or alternate decision makers to the SEOC JIC at SEMA				
SEOC	DPS/SEMA	FEMA	Establish work assignments and schedules, determine staffing level numbers and required personnel qualifications				
SEOC	DPS/SEMA	FEMA	Coordinate with the Governor's Office on the initial release of all emergency public information				
SEOC	DPS/SEMA	FEMA	Initiate media monitoring and coordination				
RRCC	FEMA		Deploy Federal External Affairs Officers to the RRCC				
SEOC	DPS/SEMA	FEMA	Facilitate exchange of information between local, state and federal officials and all external affairs partners				
SEOC	DPS/SEMA	FEMA	Submit pre-scripted EMAC requests for out-of-state resources				
SEOC	DPS/SEMA	FEMA	Submit Federal Mission Request for Assistance				
SEOC	DPS/SEMA	FEMA	Assign all state-level PIOs to coordinate a "common message"				
SEOC	DPS/SEMA	FEMA	Coordinate with local affected area officials for situational awareness and "common message"				
SEOC	DPS/SEMA	FEMA	Initiate affected area media viability assessment and coordinate messages with viable assets				
SEOC	SEMA	FEMA	Assist local authorities to deliver warnings, notices and messages through local viable mass media, social media, mass area notification, Amateur Radio, door to door, etc.				
SEOC	SEMA	FEMA	Distribute pre-packaged public information material and information				
SEOC	SEMA	FEMA	Coordinate with private sector partners (211, Americorp, etc.)				
SEOC	SEMA	FEMA	Ensure logistical needs are established for all public information operations, tasks and support				

REDACTED

ESF-15 Public Affairs (continued)							
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA	FEMA	Assess the need for additional technical assistance from FEMA or other federal support agencies				
SEOC	SEMA	FEMA	Verify and analyze information received from the field				
SEOC	SEMA	FEMA	Continue to make public notifications with proactive guidance				
SEOC	SEMA	FEMA	Coordinate activities with all affected response partners				
SEOC	SEMA	FEMA	Identify message delivery systems and viability and determine staffing at operational locations				
SEOC	SEMA	FEMA	Request national satellite truck (contractor) to support JFO				
SEOC	SEMA	FEMA	Embed staff at JFO, Base Camps, Staging Areas, and Points of Distribution and where ever media and people will assemble				
SEOC	SEMA	FEMA	Continue media monitoring and coordination				
SEOC	SEMA	FEMA	Provide technical support and assistance to all government leaders (federal, state, local) and response organizations				
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	SEMA	FEMA	Monitor the status of active mission assignments, tasks, etc.				
SEOC	SEMA	FEMA	Establish staffing protocol for essential coverage				
SEOC	SEMA	FEMA	Continue public/private partnerships, 211, media, volunteers, etc.				
SEOC	SEMA	FEMA	Initiate federal community relation activities				
SEOC	SEMA	FEMA	Provide information for incident action planning, situation reporting, and senior leadership				
SEOC	SEMA	FEMA	Begin demobilization planning				

REDACTED

Military Support							
Phase 2a – Immediate Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MONG		Execute the cracked earth plan				
SEOC	MONG		Issue a Warning Order to an Army and/or Air unit to for a TF/JTF				
SEOC	MONG		Create a tentative plan, alert troops, start movement, establish a TOC, and coordinate with the local agency that requested the support				
SEOC	MONG		Identify a central location within key graphic areas to conduct ROSI operations				
SEOC	MONG		Assess the situation and discuss courses of action with local, state and federal agencies				
SEOC	MONG	DOD	Support SEMA and MIAC with damage assessment info				
SEOC	MONG		Direct EMAC forces received from outside the state to report to designated JRSOI site				
SEOC	MONG		Conduct RSOI procedures at home station				
SEOC	MONG		Alert and activate assigned units to establish and man designated JRSOI sites				
SEOC	MONG		Establish contact with supporting state headquarters to begin coordination with units arriving from outside the state				
SEOC	MONG		Brief EMAC forces at the JRSOI site in order to gain an understanding of their AOR, mission, routes, communications, and other critical information required.				
SEOC	MONG		Control inbound EMAC units through managing numbers, types, and sequencing of forces requested base upon confirmed mission requirements and reports their arrival to respective TF commanders				
RRCC	DOD		Activate and provide DCO, DCE, REPLOs and SEPLOs to the region				
RRCC	DOD		Deploy USNORTHCOM Situational Awareness Team (NSAT) to the incident site				
RRCC	DOD		Coordinate with activated Emergency Support Functions (ESFs) in the RRCC and IMT				
RRCC	DOD		Coordinate with Joint Force Headquarters State (JFHQ-State) directly for the non-Federalizing NG capabilities and on-going response activities in the JOA				

REDACTED

Military Support (continued)							
RRCC	DOD		Monitor non-federalized NG operations executed under the EMAC				
RRCC	DOD		Deploy DCO/DCE to FEMA Emergency Operations Centers (EOC), RRCC or JFO when established and coordinate specific requirements for evacuation				
RRCC	DOD		Deploy LNOs, EPLOs and Joint Regional Medical Planning Officers (JRMPOs)				
RRCC	DOD		Employ C2 elements and assignments of JOA				
RRCC	DOD		Deploy Crisis Response Force Package Options (FPO)				
RRCC	DOD		Reposition forces and supplies to avoid loss from the incident, or reposition proximate to the incident site to speed response operations				
RRCC	DOD		Alert Stabilization and Recover /Reconstitution Force Package Option forces for deployment				
RRCC	DOD		Continue coordination with NG, federal agencies, state and local governments to ensure unity of effort. Provide a USNORTHCOM planning team to FEMA.				
RRCC	DOD		Provide assistance under Immediate Response Authority to request from an apparently proper civil authority to save lives, prevent human suffering and mitigate great property damage				
RRCC	DCO		Validate requests from the Federal Coordinating Officer (FCO)				
RRCC	DCO		Establish the DCE				
RRCC	DCO		Establish liaison among military, state and other federal agencies for support				
RRCC	DCO		Provide a liaison officer to each activated ESF				
RRCC	DCO		Coordinate with the FCO and other ESFs for defense support				
RRCC	DCO		Coordinate with the FCO and other ESFs for support of defense support providers				
RRCC	DCO		Work with the FCO and State Coordinating Officer (SCO) to integrate the missions of National Guard on State Active Duty (SAD) with active units to maximize responses while avoiding duplication of effort				
RRCC	DCO		Confirm relief priorities established by the FCO and SCO for the disaster area				
RRCC	DCO		Develop a priority of work for supporting units				
RRCC	DCO		Maintain an audit trail of mission requests to ensure each tasking is supported by a valid request and/or mission assignment number				

REDACTED

Military Support (continued)							
Phase 2b – Deployment							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MONG		Execute DSCA operations IAW the issued OPOrd referencing this OPLAN				
SEOC	MONG		Coordinate with SEMA and the primary supported agencies while planning for transition				
SEOC	MONG		Provide input to the JOC as to the anticipated duration of the MONG mission and other resources needed				
SEOC	MONG		Deploy LNO teams to establish and maintain liaison with local county and city governments that require support within the AOR				
SEOC	MONG		Provide support to state Bridge Assessment Teams				
SEOC	MONG		Receive OPCON units to form the TF and establish staging areas				
SEOC	MONG		Support state agency requests for aerial or ground route recon				
SEOC	MONG		Stage units and initiate disaster relief response and training				
SEOC	MONG		Deploy to the staging areas				
RRCC	DOD		Providing DSCA as requested by FEMA and approved by SecDef to execute Mission Assignments				
RRCC	DOD		Distribute supplies as tasked				
RRCC	DOD		Initiate Transition/Redeployment Planning				
RRCC	DOD		Capture and report costs				

REDACTED

Military Support (continued)							
Phase 2c - Employment/Sustained Response							
Loc	Coordinating Agency	Support Agency	Action to Be Taken or Event Being Observed	Start Date	Initials	End Date	Initials
SEOC	MONG		Monitor and assess the situation and support local responders to stabilize the incident				
SEOC	MONG		Provide resources and equipment at critical facilities in accordance with State Priorities				
SEOC	MONG		Provide situational awareness, including modeling of current and forecasted impacts				
SEOC	MONG		Assist state and local agencies develop a common operating picture in coordination with the SEOC				
SEOC	MONG		Continue to provide mission support				
SEOC	MONG		Provide reports and information to senior leadership				
RRCC	DOD		Continue a sustainable joint communication capability with Fed/State/local officials				
RRCC	DOD		Continue to provide mission support				
RRCC	DOD		Provide reports and information to senior leadership				

**New Madrid Seismic Zone
Earthquake – Joint State of Missouri
& Region VII Response Operations
Plan
Annex Y, Acronym List**

**State of Missouri and Federal Emergency
Management Agency, Region VII**

January 10, 2014 – Interim

Disclosure Information Statement: *The information contained herein is subject to revisions and change without prior notice.*

REDACTED

Acronym	Definition
AAR	After-action report
ACCE	Air Component Coordinating Element
ACI	Advanced Contract Initiative
ADA	Americans with Disabilities Act
ADVON	Advanced party
AMSC	American Satellite Communications
AMSP	Area Maritime Security Plan
ANG	Air National Guard
AOG	Air Operations Group
AOR	Area of Responsibility
APHIS	Animal and Plant Health Inspection Service
APHT	Applied Public Health Team
ARC	American Red Cross
ARES	Amateur Radio Emergency Services
ARF	Action Request Form
ARNG	Army National Guard
ASPECT	Airborne Spectral Photometric Collection Technology
ATF	United States Bureau of Alcohol, Tobacco, Firearms, and Explosives
ATV	All-terrain Vehicle
AVMA	American Veterinary Medical Association
BEOC	Business Emergency Operations Center
BGAN	Broadband Global Area Network
BORTAC	Border Patrol Tactical Unit
BOARSTAR	Border Patrol Search Trauma and Rescue
BSI	Base Support Installation
CAP	Civil Air Patrol
CAS	Consolidated Assistance Site
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosives
CBO	Chemical, Biological Officer
CBP	U.S. Customs and Border Protection
CCIR	Commander's Critical Information Requirements
CCP	Crisis Counseling Program
CDC	Centers for Disease Control and Prevention
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFP	CBRNE Emergency Response Force Package
CERT	Community Emergency Response Team
CFR	<i>Code of Federal Regulations</i>
CIA	Catastrophic Incident Annex
CI/KR	Critical Infrastructure and Key Resources
CIR	Critical Information Requirements

REDACTED

Acronym	Definition
CIRG	Critical Incident Response Group
CIS	Catastrophic Incident Supplement
COA	Course of Action
COAD	Community Organizations Active in Disaster
CONOP	Concept of Operations
CONPLAN	Concept of Operations Plan
COP	Common Operating Picture
COS	Chief of Staff
COTP	Captain of the Port
COW	Communications on Wheels
CST	Civil Support Team
CUSEC	Central United States Earthquake Consortium
DCE	Defense Coordination Element
DCO	Defense Coordinating Officer
DEA	Drug Enforcement Agency
DECGS	Disaster Emergency Communications Group Supervisor
DFS	Division of Fire Safety
DHS	U.S. Department of Homeland Security
DLA	Defense Logistics Agency
DMAT	Disaster Medical Assistance Team
DMORT	Disaster Mortuary Operational Response Team
DOC	Department Operations Centers
DOMS	Director of Military Support
DOT	U.S. Department of Transportation
DPA	Defense Production Act
DPMU	Disaster Portable Morgue Unit
DRF	Disaster Relief Fund
DRG	District Response Group
DRT	Disaster Response Team
DSCA	Defense Support of Civil Authorities
D-SNAP	Disaster Supplemental Nutrition Assistance Program
DSR	Department Situation Room
DSS	Digital Satellite Service
DST	Decision Support Tool
DTM	Disaster Terrain Management
DUA	Disaster Unemployment Assistance
DVCT	Donations and Volunteer Coordination Team
E	Event
EAA	Energy Assurance Association
EAS	Evacuation Assembly Site

REDACTED

Acronym	Definition
EEI	Essential Elements of Information
EER	Environmental Emergency Response
EMAC	Emergency Management Assistance Compact
EMD	Emergency Management Director
EMIMS	Emergency Medical Information Management System
EMS	Emergency Medical Services
EMT	Evacuation Management Team
EMTALA	Emergency Medical Treatment and Active Labor Act
EMWIN	Emergency Managers Weather Information Network
ENS	Earthquake Notification Service
E.O.	Executive Order
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EOV	Emergency Operations Vehicle
EPHRT	Environmental Public Health Response Team
EPI	Emergency Public Information
ERO	Electric Reliability Organization
ERS	Emergency Respite Site
ESAR-VHP	Emergency System of Advanced Registration of Volunteer Health Professionals
ESF	Emergency Support Function
ETA	Estimated Time of Arrival
FAA	Federal Aviation Administration
FBI	Federal Bureau of Investigation
FBO	Faith-based Organizations
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FERC	Federal Emergency Response Commission
FHWA	Federal Highway Administration
FLEO	Federal Law Enforcement Officer
FOB	Field Operations Bureau (MSHP)
FMC	Federal Mobilization Centers
FMCSA	Federal Motor Carrier Safety Administration
FMS	Federal Medical Station
FMV	Full Motion Video
FNS	Food and Nutrition Service
FNSS	Functional Needs Support Services
FPO	Force Package Options
FPU	Force Protection Update
FRA	Federal Railroad Administration
FRAGO	Fragmentation Order

REDACTED

Acronym	Definition
FSA	Federal Staging Area
FSIS	Food Safety and Inspection Service
FTSF	Federal Team Staging Facility
FWPCA	Federal Water Pollution Control Act
GAR	Governors Authorized Representative
GIS	Geographic Information System
GPMRC	Global Patients Movement Requirements Center
GSA	General Services Administration
HAZMAT	Hazardous Material
HAZUS-MH	Hazards U.S. Multi-Hazards
HCM	Highway Capacity Manual
HF	High Frequency
HHS	U.S. Department of Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
HQ	Headquarters
HSIN	Homeland Security Information Network
HSIP	Homeland Security Infrastructure Program
HSPD	Homeland Security Presidential Directive
HUD	U.S. Department of Housing and Urban Development
HVAC	Heating, venting, and air conditioning
HVHF	High Band VHF
IA	Individual Assistance
IAA	Interagency Agreement
IAP	Incident Action Plan
IC	Incident Commander
ICP	Information Collection Plan
ICS	Incident Command System
IMAAC	Interagency Modeling and Atmospheric Assessment Center
IMAT	Incident Management Assistance Team
IMT	Incident Management Team
IOF	Initial Operating Facility
IPS	Integrated Planning System
IRV	Incident Response Vehicle
ISB	Incident Support Base
IST	Incident Support Team
IT	Information technology
IWG	Integrated Work Group
JDOMS	Joint Director for Military Support
JFHQ-MO	Joint Forces Headquarters Missouri
JFO	Joint Field Office

REDACTED

Acronym	Definition
JIC	Joint Information Center
JIS	Joint Information System
JOC	Joint Operations Center
JRMPO	Joint Regional Medical Planning Officer
JRSOI	Joint Reception Staging/Onward Integration
JTF	Joint Task Force
Ku	Kurtz-under
KW	Kilowatt
LAN	Local Area Network
lbs	Pounds
LE	Law Enforcement
LEOC	Local Emergency Operations Center
LEOP	Local Emergency Operations Plan
LEPC	Local Emergency Planning Committee
LMR	Land Mobile Radio
LMRS	Logistics Management and Resource Support
LNO	Liaison Officer
LOMACC	Local Mass Care Coordinator
LOS	Line of sight
LPHA	Local Public Health Agency
LPN	Licensed Practical Nurse
LSA	Logistics Staging Area
LTCR	Long-term Community Recovery
MAE	Mid-America Earthquake
MARAD	Maritime Administration
MARC	Mid-America Regional Council
MATTS	Mobile Air Transportable Telecommunications System
MCERT	Mass Care Emergency Response Team
MDA	Missouri Department of Agriculture
MDC	Missouri Department of Corrections
MDCC	Missouri Department of Conservation
MDEC	Missouri Department of Economic Development
MDESE	Missouri Department of Elementary and Secondary Education
MDF	Missouri Disaster Fund
MDFS	Missouri Division of Fire Safety
MDHSS	Missouri Department of Health and Senior Services
MDMH	Missouri Department of Mental Health
MDNR	Missouri Department of Natural Resources
MDPS	Missouri Department of Public Safety
MDSS	Missouri Department of Social Services

REDACTED

Annex Y – Acronym List

Joint Missouri & Region VII Response Operations Plan

Acronym	Definition
MEDVAC	Medical evacuation
MEMS	Mobile Emergency Medical Systems
MEOV	Mobile Emergency Operations Vehicle
MERC	Missouri Emergency Response Commission
MERS	Mobile Emergency Response Support
MFDEA	Missouri Funeral Director's and Embalmer's Association
MFDADRT	Missouri Funeral Directors Association Disaster Response Team
MHA	Missouri Hospital Association
MHT	Mental Health Team
MHz	Megahertz
MIAC	Missouri Information Analysis Center
MIDRO	Missouri Interfaith Disaster Response Organization
MISO	Mid West Independent Transmission System Operators
MMI	Modified Mercalli Intensity
M _w	Moment Magnitude
MMU	Mobile Medical Unit
MOA	Memorandum of Agreement
MOB	Mobilization
MoDOT	Missouri Department of Transportation
MoNAP	Missouri Nuclear Accident Plan
MONG	Missouri National Guard
MOP3	Missouri Private Public Partnership
MoRET	Missouri Radiological Emergency Team
MOU	Memorandum of Understanding
MOVOAD	Missouri Voluntary Organizations Active in Disaster
MPSE	Missouri Public Services Commission
MPUA	Missouri Public Utility Authority
MRE	Meals-Ready-to-Eat
MRV	Multi-radio Van
MSB	Medical Support Base
MSCA	Military Support to Civil Authorities
MSHP	Missouri State Highway Patrol
NASA	National Aeronautics and Space Administration
NASEO	National Association of State Emergency Officials
NCP	National Contingency Plan
NCC	National Coordination Center
NDART	National Disaster Animal Response Team
NDMS	National Disaster Medical System
NECLC	National Emergency Child Locator Center
NCMEC	National Center for Missing and Exploited Children

REDACTED

Acronym	Definition
NEFRLS	National Emergency Family Registry Locator System
NEHRP	National Earthquake Hazards Reduction Program
NEIC	National Earthquake Information Center
NERC	National Electric Reliability Council
NFIP	National Flood Insurance Program
NGO	Non-Governmental Organizations
NGRF	National Guard Response Force
NICC	National Interagency Coordination Center
NIFC	National Interagency Fire Center
NIMS	National Incident Management System
NISP	National Industrial Security Program
NLSA	National Logistics Staging Area
NMETS	National Mass Evacuation Tracking System
NMSZ	New Madrid Seismic Zone
NOAA	National Oceanic and Atmospheric Administration
NOC	DHS National Operations Center
NORTHCOM	Northern Command
NRC	Nuclear Regulatory Commission
NRCC	National Response Coordination Center
NRF	National Response Framework
NSAT	USNORTHCOM Situational Awareness Team
NSP	National Search and Rescue Plan
NTIA	National Telecommunications and Information Administration
NWS	National Weather Service
NVOAD	National Voluntary Organizations Active in Disaster
NVRT	National Veterinary Response Team
NVS	National Veterinary Stockpile
NWG	National Working Group
NWS	National Weather Service
OA	Operational Area
OEC	Office of Emergency Communications
OFA	Other Federal Agency
OIC	Officer in Charge
OJP	Office of Justice Program
OMB	Office of Management and Budget
OPCON	Operational Control
O-Period	Operational Period
OPLAN	Operations Plan
OPORD	Operations Order
OSC	On-scene Coordinator

REDACTED

Acronym	Definition
OSHA	Occupational Safety and Health Administration
OSTP	Office of Science and Technology Policy
oz	Ounce
PAGER	Prompt Assessment of Global Earthquakes for Response
PAO	Public Affairs Office
PDA	Preliminary Damage Assessment
PETIC	Post-earthquake Technical Information Clearinghouse
PETS	Pets Evacuation and Transportation Standards
PHS	U.S. Public Health Service
PIBIT	Post-incident Bridge Inspection Team
PICV	Public Information Critical Venue
PIO	Public Information Officer
PKEMRA	Post-Katrina Emergency Management Reform Act
POD	Points of Distribution
PPE	Personal protective equipment
PSMA	Pre-Scripted Mission Assignment
PSO	Principal State Official
PSSW	Pre-scripted Statement of Work
QRF	Quick Reaction Force
RACES	Radio Amateur Civil Emergency Service
RAHP	Regional All-Hazards Plan
RAM	Random Access Memory
RBC	Responder Base Camp
RDF	Rapid Deployment Force
REPLO	Regional Emergency Preparedness Liaison Officer
REQ A	Request for Assistance
RFF	Request for Forces
RN	Registered Nurse
RNCS	Regional Net Control Station
RPC	Reception Processing Center
RRCC	Regional Response Coordination Center
RSOI	Reception, Staging, and Onward Integration
RSS	Receipt, Staging, and Storage
SACC	State Area Coordination Center
SAD	State Active Duty
SAMHSA	Substance Abuse and Mental Health Services Administration
S&R	Search and Rescue
SAT	Service Access Team
SAVE	Structural Assessment and Visual Evaluation
SCHIP	State Children’s Health Insurance Program

REDACTED

Acronym	Definition
SCO	State Coordinating Officer
SECDHS	Secretary of Homeland Security
SED	State Emergency Duty
SEMA	State Emergency Management Agency
SEOC	State Emergency Operations Center
SEOP	State Emergency Operations Plan
SEPLO	State Emergency Preparedness Liaison Officer
SFLEO	Senior Federal Law Enforcement Official
SHPO	State Historical Preservation Officer
SITREP	Situational Report
SLO	State Liaison Officer
SLSC	Senior Leadership Steering Committee
SME	Subject Matter Expert
SNAP	Supplemental Nutrition Assistance Program
SOG	Standard Operating Guide
SOP	Standard Operating Procedures
SOSC	State On-Scene Coordinator
SNS	Strategic National Stockpile
SPOD	State Point of Distribution
SSA	State Staging Areas
STAMACC	State Mass Care Committee
STARRS	St. Louis Area Regional Response System
STB	Surface Transportation Board
STOLS	System to Locate Survivors
TAC	Technical Assistance Contract
TACON	Tactical Control
TAG	The Adjutant General
TCL	Target Capabilities List
TF	Task Force
TFR	Temporary Flight Restrictions
TNC	Threaded Neill-Councilman
TNS	Telephone Notification System
TSA	Transportation Security Administration
UC	Unified Command
UCG	Unified Coordination Group
UHF	Ultra High Frequency
USACE	U.S. Army Corps of Engineers
USAID	U.S. Agency for International Development
US&R	Urban Search and Rescue
U.S.C.	<i>United States Code</i>

REDACTED

Annex Y – Acronym List

Joint Missouri & Region VII Response Operations Plan

Acronym	Definition
USCG	U. S. Coast Guard
USDA	U.S. Department of Agriculture
USDOD	U.S. Department of Defense
USDOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
USDOJ	U.S. Department of Justice
USFA	U.S. Fire Administration
USFS	U.S. Forest Service
USGS	U.S. Geological Survey
USMS	U.S. Marshals Service
USNORCOM	U.S. Northern Command
USPFO	U.S. Property Affairs Office
UST	Underground storage tank
USTRANSCOM	United States Transportation Command
VA	Veterans Administration
VAL	Voluntary Agency Liaison
VHF	Very High Frequency
VMAT	Veterinarian Medical Assistance Support Team
VOAD	Voluntary Organizations Active in Disaster
VOCA	Victims of Crime Act
VTC	Video teleconference
WAN	Wide Area Network
WMD	Weapons of Mass Destruction

REDACTED - New Madrid Seismic Zone Synchronization Matrix* (Mw 6.5 or greater)												
ESF	Action	Event	Activation				Deployment		Employment/ Sustainment Response		Long-term Recovery	
		E	0 to 4 hours	4 to 8 hours	8 to 12 hours	12 to 24 hours	24 to 48 hours	48 to 72 hours	72 to 96 hours	96 to 120 hours	IAP Released	
S/F-5	Upon verification of an earthquake , activate the earthquake OPLAN											
S-5	Activate SEOC and alert all ESF-partners											
F-5	Activate RRCC and alert all ESF-partners											
All	Staff Department Emergency Operation Centers											
All	Execute pre-scripted Executive Orders, Disaster Declaration Requests, ARFs and EMAC Requests											
S-5	Activate Emergency Alert System (EAS)											
MONG	Activate the MONG Cracked Earth Plan											
MONG	Issue JOC Warning Order to an Army and/or Air unit to for a TF/JTF											
S15	Establish the JIC/JIS											
F5	Deploy Incident Management Assistance Teams											
S-15	Coordinate with the Governor's Office on release of all emergency public information											
S-1	Deploy Post Incident Bridge Inspection Team auto response (5 0+)											
All	Anticipate maximum damage to the 17 critical infrastructure sectors											

S-5	Initiate Civil Air Patrol aerial assessment											
All	Assess status and availability of District/Regional Offices and local staff											
S-5	Request temporary flight restrictions from FAA											
S2	Activate Emergency Tactical Interoperable Communications Plans											
S/F-5	Impliment an Information Collection Plan											
S/F-5	Determine validity of pre-scripted Operational Objectives											
S/F-5	Determine operational priorities and rules of engagement											
S-5	Request federal Urban Search and Rescue resources											
S-2	Assess local damage to emergency communications systems											
S-6	Utilize the National Shelter System for mass-care operations											
S-2	Establish a Local Net Control Station to transmit local status reports to MSHP Troop HQ											
S-5	Establish contact with county-level emergency management to determine local government viability and resource needs											
S-4	Activate and coordinate the Missouri Fire Mutual Aid System											
All	Begin pre-deployment of resources to forward staging in anticipation of ground transportation availability											
S-12	Activate MDNR-Energy Resource Center and State of Missouri Energy Assurance Plan											

MONG	Alert MONG troops, start movement, establish a TOC, and coordinate with the local agency that request support											
S-1	Divert east bound ground traffic to north and south routes											
S-2	Dispatch the Mobile Communications Vehicle											
S-2	Begin clearance (not removal) of debris as encountered											
All	Coordinate provision of services, equipment, and supplies to support operations											
S-5	Evaluate and determine need to provide critical government services at local jurisdictional level											
S-5	Decide if SACCs should be activated											
S/F-5	Use GIS demographics modeling to determine anticipated affected population											
S-8	Obtain Governor's executive orders recognizing out of state health care providers licenses, designating a central medical examiner, and approving altered standards of care											
F/S-15	Initiate media monitoring and coordination											
S-5	Develop State Incident Action Plan with input from other ESF Coordinators											
S-6	Determine mass-care requirements and feeding support for local jurisdictions accommodating evacuees											
S/F-2	Prepare list of critical resources needed to restore emergency communications											

S-5	Coordinate the allocation of Incident Support Teams to support local jurisdictions											
S-5	Activate evacuation management team (See Evacuation Plan)											
S-6	Determine need for evacuation support versus supporting evacuees within impacted area											
S-5	Establish State Area Coordination Centers											
S/F-15	Coordinate public information											
All	Request appropriate declarations, activations, and waivers											
S/F-7	Provide resources and expertise to support disaster logistics and resource management operations											
S/F-7	Activate and operate State Staging Areas											
S/F-7	Coordinate activation of Base Camps and PODs											
S/F-7	Execute agency-wide logistics plans, policies, procedures, doctrines, standards, and governance											
F-7	Coordinate logistics through FEMA Headquarters Logistics Operations Center											
F-7	Locate, procure, and issue resources to support the federal emergency response											
S/F-7	Locate and coordinate use of available space for incident coordination/management activities											
S/F-8	Respond to immediate medical needs of injured and set up medical triage areas and casualty collection points											
S-8	Request National Disaster Medical System activation											

S-8	Coordinate movement of MO 1-DMAT equipment and staff to the area											
S-8	Request DMAT and DMORT assets											
S-8	Develop status reports on casualties, building damage, state-wide bed poll, fatalities, and medical sheltering needs											
S-8	Determine appropriate placement of medical support trailers (Mass Casualty Incident and Medical Surge Trailers)											
S-8	Determine deployment plan for the Mobile Medical Unit (MMU) and Modular Emergency Medical System											
S-8	Determine placement of Functional Needs Sheltering Caches											
S-8	Activate ambulance services that have Memorandums of Understanding											
S-8	Request National Ambulance contract support											
S-8	Establish plan to open Alternate Care Sites											
S-8	Activate 'Show-Me Response' (ESAR-VHP)											
S-12	Collaborate with private, cooperative and municipal energy resource owners and energy partners											
S-12	Establish power restriction priorities											
S-13	Assist local law enforcement with maintain law and order											
S-13	Provide traffic and crowd control in coordination with evacuation and mass care consideration											
S-15	Initiate affected area media viability assessment											

MONG	Assess the situation and discuss courses of action with local, state and federal agencies											
S-1, 2, and MONG	Begin clearing roadway of debris and coordinate with law enforcement damaged or blocking vehicles											
All	Provide operational priorities to the field teams and coordinate between state and federal entities to identify staffing needs											
All	Establish and implement rotation schedules for response teams											
S/F-15	Begin public section protective guidance with external affairs and safety information regarding critical infrastructure											
S-2	Begin evaluation of drinking water, waste water and sanitation systems											
S/F-2	Begin dam assessment											
S/F-1 and Air Ops	Coordinate ground and air routes for resources ingress and egress											
All	Deploy response assets into forward staging, bases or into the incident area											
S-4 and 10	Coordinate all firefighting/hazardous materials response in the affected area (inter-state resources, intra-state resources, federal assets, etc)											
S-15	Develop public information messages concerning earthquake hazards											
S-8	Activate the Licensed Emergency and Disaster Registry (LEAD-R)											
S-6	Reguest assistance from National Disaster Animal Response Team											
S-8	Activate Show-Me Response											
S-8	Activate call center to track pet shelter activation											

S-8	Determine need for Consolidated Assistance Site											
S-8	Activated MCERT and deployed as needed											
S-2	Coordinate procurement of communications equipment and services											
S-8	Coordinate Missouri Funeral Director's and Embalmer's Association and SEMA response to provide mortuary support											
S-8	Coordinate activation of Family Assistance Centers											
S-8	Request SNS assets and activate the Receipt, Staging, and Storage (RSS) Warehouse											
S-6	Identify long-term care and other non-traditional facilities that might be suitable to house ill patients											
S/F-6	Integrate volunteers from unaffected states											
S-13	Provide security at response nodes for medical, mass care, and response operations											
Air ops	Identify and arrange for use of aircraft and other assets in providing urgent airlift and other transportation support as needed											
S-5 and 9	Mobilize Missouri Task Force 1 (MO-TF1)											
S/F-5 and 9	Mobilize Nebraska Task Force 1 (NE-TF1)											
S-5	Activate Civil Air Patrol for aerial/ground search operations											
S-8	Disseminate the state procedures for handling the deceased											

S/F -9	Determine operational priorities and rules of engagement for S&R response (i.e. National Grid)											
S-11	Request the deployment of APHIS resources											
S-12	Establish prioritization of power to critical infrastructure											
S-7	Establish delivery routes and methods for fuel											
S/F-14	Organize an ESF-14 task force and framework to incorporate recovery											
S-5	Appoint recovery point of contact to represent State											
S-5	Disseminate process for collection of damage and impact assessments											
S-15	Distribute pre-packages material and information											
S-6	Coordinate with private sector partners (211, Americorp, etc)											
MONG	JFHQ-MO will establish contact with supporting state headquarters to begin coordination with units arriving from outside the state											
MONG	Report to JRSOI site to gain an understanding of AOR, mission, routes, communications, and other critical information required											
DCE	DOD will activate and provide DCO, DCE, REPLOs and SEPLOs to the region											
DCE	Deploy USNORTHCOM Situational Awareness Team (NSAT)											
DCE	Deploy LNOs, EPLOs and Joint Regional Medical Planning Officers (JRMPOs)											
MONG	Deploy Crisis Response Force Package Options											

DCE	Establish the DCE											
MONG	Establish MONG County-level liaison officers											
All	Maintain an audit trail of mission requests											
S-1	Continue to gather information and situational awareness for air, rail, road, waterway and port											
S/F-1	Identify viability of existing priority routes and systems; reprioritize if necessary											
S/F-1	Continue assessment of all transportation routes including bridges and railines											
S/F-1	Establish status for closing /opening of port facilities and vessels											
S/F-1	Coordinate with waterway ferries for viability and transportation of resources, equipment and personnel											
F-10	Request deployment of the USCG National Strike Force											
F-10	Deploy and manage the EPA response teams for hazardous materials incidents											
F-10	Deploy CDC Agency for Toxic Substance and Disease Registry emergency response teams											
F-10	Provide guidance on personal protective equipment											
S-5	Deploy Incident Support Teams											
S-6	Activate spontaneous volunteer reception											
S-6	Support mass-care and sheltering within and outside the impacted area											
S-6	Ensure effective pet sheltering and evacuation											
S-6	Deploy VMAT to needed locations											

S-6 and F-11	Ensure continuous bulk distribution delivery											
S-6 and F-11	Establish a state level Feeding Task Force to develop long-term strategy for continuous feeding											
F-11	Engage USDA commodity foods program, as needed											
S-6	Provide support to evacuation efforts											
S-6	Inspect shelter locations, construct temporary shelters											
S/F-6	Manage daily mass-care operations											
S/F-11	Provide technical expertise, nutritional assistance and medical care for sheltering pet populations											
S-6 and F-7	Open and staff PODs and receive and distribute resources											
S-7	Coordinate allocation of resources with other State Departments through the SEOC Logistics Section											
F-7	Following a Presidential Declaration, support requests for federal assistance for disaster aid and submit ARFs											
S-7	Activate the BEOC											
S/F-7	Support human resources, equipment, facilities, contracting expertise, and warehousing											
S/F-7	Provide material management including sourcing, ordering and replenishment, storage, and issuing of supplies and equipment											
S/F-8	Provide facilities management for Base Camps, DCs, MOB Centers, and NLSAs											

S-8	Collaborate with the Missouri Hospital Association											
F/S-8	Coordinate with U S Transportation Command											
S-14	Activate and deploy Large Animal Rescue Team resources and State Veterinary Corps resources											
F-8	Activate and deploy the US Public Health Service Commissioned Corps veterinary teams and epidemiologists											
S-11	Coordinate with MDNR for technical assistance for the selection of animal burial sites											
S-8 and 11	Coordinate food inspection, vector control and other public health issues											
S-8 and 11	Properly dispose of contaminated food products											
S-12	Assess timeframe to re-establish generation and transmission plants (6) that supply Co-Ops (41)											
S/F-13	Assist in securing local jails and facilities that hold large quantities of firearms											
S/F-13	Control access to damaged areas											
S/F-14	Coordinate with SBA, Missouri Public, Private Partnership											
F-1, 2, and 12	Initiate consideration and activation for regulatory waivers											
S-6	Consolidate shelter operations for maximum sustainability											
S-14	Identify long term housing requirements and solutions											
S-6 and F-11	Transport pets outside of state if needed for long term sheltering or adoption											

S-6	Reassess shelter demand and capacity, work with local jurisdictions for routing evacuees out of state, if required											
S/F-7	Coordinate field operations work with SEMA for terrain management, movement control, and security needs											
S-8	Through medical caches and SNS assets, support people with chronic illnesses											
S/F-8	Conducting disease surveillance and implementing interventions necessary to prevent disease outbreak											
S/F-8	Coordinate use of the Joint Patient Assessment and Tracking System and National Mass Evacuation Tracking System											
S/F-8	Coordinate deployment of mental health workers to integrated shelters											
F-8	Request personnel (U S Public Health Service Commissioned Corps, NDMS, Federal Civil Service, and civilian volunteers) to address public health, medical, and veterinary medical needs											
F-8	Act as the health and medical services information conduit to U S Embassies/Consulates											
Air ops	Coordinate with the Federal Aviation Administration for air traffic control support for priority missions											
S/F-8	Coordinate with NDMS hospitals to provide incident-related medical care to authorized NDMS beneficiaries											

F-8	Furnish available VA hospital care and medical services to individuals responding to, involved in, or otherwise affected by a major disaster or emergency											
F-11	Provide assistance to small animal breeders, zoos and exhibits, and research facilities that house animals											
F-8	Provide surge capability for laboratory and diagnostic support											
F-15	Request national satellite truck (contractor) to support JFO											
S/F-15	Embed public information staff at JFO, Base Camps, Staging areas, Points of Distribution and wherever media and people will assemble											
S-10	Create a permit and fee waiver process for burning and the reopening of closed landfills, etc											
S-8	Coordinate environmental and sanitation health issues											
S-8	Gather information on the hospitals and nursing homes within the affected area											
S-8	Determine if additional deployable field hospitals are needed											
S/F-11	Form animal carcass disposal teams and begin process of carcass disposal; Record location of disposal sites											
S-11	Review euthanasia processes and issue procedures to field teams											
S-11	Augment services to provide animal rescue, animal evacuation, humane euthanasia											

S-6 and F-11	Provide animal food and water to the affected area											
F-11	Provide a reasonable level of assistance and care for livestock											
F-1	Evaluate the coordination and public information campaign of inter-state detour routing around impacted areas											
S/F-14	Validate preliminary information and continue to gather and analyze information for sustainment and recovery operations											
S/F-8	Acquaint families with available health resources and services, and make appropriate referrals											
S/F-6	Support reunification efforts through its “Safe and Well” website and in coordination with government entities											
S-14	Implement state recovery framework											
F-15	Initiate federal community relation activities											